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FIGURE 2078

MPPRLANFCIFSRDGVFPCWPGWSQTPDLKWSTCLGLPKCWDLCPDRRGRIL

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FIGURE 2079A

GATTGCCCCCTGTGGGTCACTTTCTCAGTCATTTTGAGCTCAGCCTAATCAAAGACTGAGGTTATGAAGTCGATC
CTAGATGGCCTTGACAGATACCACCTTCCGCACCATCACCCTGACCTCCTGTACGTGGGCTCAAATGACATTACG
TACGAAGACATCAAAGGTGACATGGCATCCAAATTAGGGTACTTCCCACAGAAATCCCTTTAACTTCCTTTAGG
GGAAGTCCCTTCCAAGAGAAGATGACTGCGGGAGACAACCCCAAGCTAGTCCCAGCAGACCAGGTGAACATTACA
GAATTTTACAACAAGTCTCTCTCGTCTTCAAGGAGAATGAGGAGAACATCCAGTGTGGGGAGAACCTTCATGGAC
ATAGAGTGTTCATGGTCTGAACCCCAAGCAGCAGCTGGCCATTGCAGTCTGTCCCTCACGCTGGGCACCTTC
ACGGTCTTGAGAACCTCCTGGTGTGTGCGTCATCTCCACTCCCGCAGCCTCCGCTGCAGGCCCTTCTTACCAC
TTCATCGGCAGCCTGGCGGTGGCAGACCTCCTGGGGAGTGTCAATTTTGTCTACAGCTTCATTGACTTCCACGTG
TTCCACCGCAAAGATAGCCGCAACGTGTTTCTGTTCAAACCTGGGTGGGGTCACGGCCTCCTTCACTGCCTCCGTG
GGCAGCCTGTTCTCACAGCCATCGACAGGTACATATCCATTACAGGCCCTGGCCCTATAAGAGGATTGTACACC
AGGCCCAAGGCCGTGGTGGCGTTTTGCTGTATGTGGACCATAGCCATTGTGATCGCCGTGCTGCCTCTCTGGGC
TGGAAGTGCAGAACTGCAATCTGTTTGTCTCAGACATTTTCCCACACATTGATGAACCTACCTGATGTTCTGG
ATCGGGGTACACAGCGTACTGCTTCTGTTTATCGTGTATGCGTACATGTATATTCTCTGGAAGGCTCACAGCCAC
GCCGTCCGCATGATTACAGCGTGGCAGCCAGAAAGAGCATCATCCACACGCTCGAGGATGGGAAGGTACAGGTG
ACCCGGCCAGACCAAGCCCGCATGGACATTAGGTTAGCCAAGACCCCTGGTCTGATCCTGGTGGTGTGATCATC
TGCTGGGGCCCTCTGCTTGCAATCATGGTGTATGATGTCTTTGGGAAGATGAACAAGCTCATTAAAGACGGTGT
GCATTCTGCAGTATGCTCTGCCTGCTGAACCTCCACCGTGAACCCCATCATCTATGCTCTGAGGAGTAAGGACCTG
CGACACGCTTTCCGGAGCATGTTTCCCTCTTGTGAAGGCACTGCGCAGCCTCTGGATAACAGCATGGGGGACTCG
GACTGCCTGCACAAACACGCAACAATGCAGCCAGTGTTCACAGGGCCGAGAAAGCTGCATCAAGAGCACGGTC
AAGATTGCCAAGGTAACCATGTCTGTGTCCACAGACACGCTGCGGAGGCTCTGTGAGCCTGATGCCTCCCTGGC
AGCACAGGAAAAGAATTTTTTTTTTAAAGCTCAAAATCTAGAAGAGTCTATTGTCTCCTTGTTATATTTTTTA
ACTTTACCATGTCTCAATGAAAAGGTGATTGTACCATGATCACTTATCAGTTTGCTAATGTTTCCATAGTTTAGG
TACTCAAATCCATTCTCCAGGGGTTTACAGTGAAGAAAGCCTGTTGTTTAAAGTACTGAACGATCCTTCAAAGT
CTCAATGAAATAGGAGGGAACCTTTGGCTACACAATTGGAAGTCTAAGAACCCTGGAAGAAATGCCATCAAATG
AATAATGCCCTTTGTAAACCAACTTTCACTATAATGTGAAATGTAAGTGTCCGTAGTATCAGAGATGTCCATTTT
TACAAGTTATAGTACTAGAGATATTTTGTAAATGTATTATGTCTGTGAGATGTGTATCAGTGTATTATGTGCTA
TTAATATTTGTTTAGTTTACGCAAACTGAAAGGTAGACTTTTATGAGAACAATGGACAAGCAGTGGATACGTGTC
AATGTGTGCACTTTTTTTCTATATTATTGCCCATGATATAACTTTAGAAAATAAACCTTAATATTTCTTCAAATAT
CTCTATTTAATTTTACACTGAAATAACCGTAAAGGTTTATTTTTCTGTTACCTCAACAAGAAGAAATTTGAAGAC
TTCAAATATTGAGCAGAATTCATTCTACTTTAAAAATTTATTAGCCCTGCATTTTTCATAGGAAGACACATTATC
TTCTGGACTATAGCTGTTCTAATGGATTATAATCAGAATGGAAAGAGAGAAAGCATATTGACTTTTTTTGAGCGAC
ATCTCTGACTTTCTTTAGTCTTTAGCTATTACTGGATCTCTTAAGACAGCATGTGTTAATCTTAATGTATATCGT
TATCACTGTGCAGTTGCTGTTTACTTGAATAGTATTGTGTTTCTATATTCCAGGTTTAAAGTAGATTTTCATGCCTG
GGTGGCCAAACAACAGTCTTCATTTTTTTTAAATTGAAAAGAGTAGTGTCTGGATCAGTAAATTTATACTGTGTG
TGAGTGTGAATATAAATGTGTGTATGTGTGTTTCTGTCTGTAACTGTTACAGTAATGTATATAAAGTGAGAAAAC
TGTGACCAAGTATAAATTTTACCCTTGTGCACTCTTGACATGGATTTCAGTTTCTAAAATTGAGTTCTTCTCT
GTAATCTTGTGATAAAAATACTGACTCCAACCATTTCAAAAATTTACCCCATCCCTCCTTAAGAGATTGGATCA
AGTATTACTAAATTGACCTTTAGGTATTACACAAGACCAAGTGTCTAGCAAAAAATAATGACAGGCATCCAAGGAA
GGGATGTATTTGTAGTGTATTGCCAGGAAAGGAGAGTACTTTGGTTTCTGAGCACCGAATATTGAGCAATATGT
CAGTCACTAAAAGGAAGACAGTTCTACAGAAAAACAATGGTAACATTTTTCAATAGCGTGTGTAGATAGTATGCA
CTATATACATCACGTTAAAGTAGGACTATCACACCCAGCCATGTGGCTAAAAAAGCTGAATCAGACAGTGGATG
AGACACACAACGGCAGTGAAGAACCGATACACTTGGCATTGACGTCTAGCTATGCTGTATCTGTGCTTTGCCAC
ATGCCCTTGGTGACAGCTGAGCACCCAGCTCTGTCTTGGTAGGTTTGGGCTAAGGAACAAATCTCTCCTTTGCTC
GTGGTTAGCAAGATACACTCAAGCATGAAGATAAACACAGCTGCTTTCTTCTTACACCCCGGTCTCATGCTCCTT
AATGGCGCCATGGGTGCTTGTGGGCCCTTTTCCAGTAAGGAATGATATTGCTGAAGAATCTACTTAACCCTGAC
AAATTTTAATTATAATCTCTTCTTATACAGATAAAACATGACTCCTACAAGGCCCAAGGTTTACATAGTCTGAA
GTGAAGTACAGAGCTGGCATCTATCTGGTGATTTCTAGCTCTCGAGATACCAAGCAGCCTGATGGGGCAGTTCC
CCTTCTTACGGTTCACGCTCTAAGGCAGGATGTGGCTTATGAGATACTTTGCATTGTCTGTCTGCACACCTTGAA

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FIGURE 2079B

TCTGCCTGCTGGCTCCCTTACTTTACCTCTCTGTTCATGTGCAGATGAAGGCTCAGGGTGCTAGAGGATTAGTAAG
ATCTCTTTCTAAAGACAGGAGAGATTATTTACAAGAAGAACTCACCAGGGTTTAGTTTGCAATTAAGAATTGCCA
GTCTTTTGTCTGCATCATCTTGAACATTAATCCACATGTTTCAGAGCTCACCAGGCAGTACCAATGCTCTTTTC
ACAGCTATGAAGAGCTAGAGAAATTCTTGTTATGGTAGAAAAATTTACGATTTCATTTTTGAAACTGCATTTGTG
CGTATGCAGTGTAGATTTTATAGTGTGTTGTGCTTTCAAGATCTAAATCATATATAATAAATTAAGGGACAAATGG
GGCTGACAGCACTAACTTGGTGCTTATTGATATTCTAAGAAATATCTGTGAAATATCATCACGTATGTTATACA
ACCTTCATTTAAAAAGGTTTAAACTAGTTAGATTACCTTTGACACTTTTCATATCATTTCCTTAACCCCAAGTGAC
GAAAACATTGTCCCAATGAATATACTCATTAGAATTACCATTGTGTTAATATCACTCATTAAATTAACCCCAATAAT
TAGATCCATTAATTTAAATGATTTAAATTTAAGTAAGTTTATAAGGCTGACATCAGAGGTATCTTACTTTCCCT
CTGAGGATGATGTACTTGCCCTGACCATGCATTTTACCATCACACATGTTTCAGAAAGGGCCAAATTCCTCAACCTG
CTCATTTTTTTTTTATCAGAGTCATGATGAATCAGTCCTAGAATGTTTCATTTGCACAAGTAGGGCTGCCTCCAA
GAGGAACCTCTGATTTATTTTGTATGAAATATATGTGAAAGGATATGAATCTGAGAGATGCTGTAGACATCTGTC
CTACACTTGAGATGATTTCCAAGCCTCTCTGGCACTTTGAGTTAAGTCTATCTGGTATTAAATGCCAAGGACCTT
TTGCTGCCTAAATCCACTCTGCAGGAAATAGGCCCAACCACCAGATGAGAATTAGGCCCTGGATGAGTAGCGCTA
TAGTTACTGTCTGTGTTGATTAAATTTCTGCCATTTTCATGTCCATAAAAGAGACCACCCATATCATGCACACAATTA
GATTTCTCACACTCTAACTGTATATTTGTATGATATTTTAAATCTCCTAAATGCTGGGCAATGGCTATTAAACAA
TTAATTTGCTTTGCACTGGCCTTCTGATGAAATGTTAACAATGCCTATTGTAATATAGAAAAAACATTCTATCTA
CTGATTTGGGCTGAATGTATGTAAATAGGTTTCTAAAAAGTCAGATGTTTGAGCAGTGGCCTACAAATCAGTAAT
TTTCGGATGGGAGAGTTTCTTTACATTGCCGTGGCATCTTAAAGCTATCTTCATGTAAATTGACTGTACTAGGC
CTACTGGGGATCAGAGTTCCCAAGAAAGGAAACCTTTTCTTGTATCTGGATTCAAATTTATTTCCAATGTTTCAA
GCGGGAACATGACTCTTTATTGTCTGTAAATCTAACATTATTACTTTTCTCTTAGAAGAATATTGTATTGTTA
GATGTTTGTGAGCTGGTAACATCGTTGCAACCACTGCAATATCTTCGTTAGTAATCTGTATAATACTTTGTATA
CAAGTACTGGTAAGATTGTTATTAAATGTAGCTTCAGTCATTAAATTACTATAGCAAAGTAGTACTTCTTCTGTA
ATATTTACAATGTATTAAAGCCACAGTATATTTTATTCAATGTAATTAACTGTAACTTATTCAAAGAGAAAA
CATCTCATCATGTCTATTGTCCAAAGTTACCTGGAATCAAATAAAAAATTCTAGATTACCATGAAGAACATA

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FIGURE 2080

GAGCGCGGTTACCGGACGGGCTGGGTCTATGGTCGCTCCGCGGGCCGCTCCGCCGGCTGGTGCTTTTTTATCAGG
GCAAGCTGTGTTCCATGGCAGGGAACTTTTGGCAGAGCTCCCACTATTTGCAATGGATTTTGGATAAACAAGATC
TGTTGAAGGAGCGCCAAAAGGATTTAAAGTTTCTCTCAGAGGAAGAATATTGGAAGTTACAAATATTTTTTACAA
ATGTTATCCAAGCATTAGGTGAACATCTTAAATTAAGACAACAAGTTATTGCCACTGCTACGGTATATTTCAAGA
GATTCTATGCCAGGTATTCTCTGAAAAGTATAGATCCTGTATTAATGGCTCCTACATGTGTGTTTTTGGCATCCA
AAGTAGAGGAATTTGGAGTAGTTTCAAATACAAGATTGATTGCTGCTGCTACTTCTGTATTAAAACTAGATTTT
CATATGCCTTTCCAAAGGAATTTCTTATAGGATGAATCATATATTAGAATGTGAATTCTATCTGTTAGAACTAA
TGGATTGTTGCTTGATAGTGTATCATCCTTATAGACCTTTGCTCCAGTATGTGCAGGACATGGGCCAAGAAGACA
TGTTGCTTCCCCTTGCAATGGAGGATAGTGAATGATACCTACAGAACGGATCTTTCCTACTGTATCCTCCTTTCA
TGATAGCTTTAGCTTGCTTACATGTAGCCTGTGTTGTACAGCAGAAAGATGCCAGGCAATGGTTTGCTGAGCTTT
CTGTGGATATGGAAAAGATTTTGGAATAATCAGGGTTATTTTAAACTATATGAGCAGTGGAAGAATTTTCGATG
AGAGAAAAGAGATGGCAACCATTCTTAGTAAGATGCCAAAACCAAACCACTCCAAACAGTGAAGGAGAGCAGG
GTCCAAATGGAAGTCAGAACTCTAGCTACAGCCAATCTTAAACATTCCGAAGAATTCATAGTGGACCACTTGG
AAATAAACCAATTGGACAGATTTTCAAGTAATGTCTTCAGTGGAACACAAATGAAAATGAATAGCTTGTCTGTCAA
GCATATTGGAAAGTGATTTTATTTTGCAAAATAAGTTTTCTTTAATATGATTCTAGTACATAATTGATTAAAA
TCTCTTGATTATAAATGTTTGGAAGGTTCTAAGGGGACCTACAGACAGACATACATAGACATTTCAAAATTAAT
AGCTTTTGATTAGTATAAATATTTCTTAATTTGGATAATAAAAATTGTAGCTTTTTTATTAAGCCAGGAAACATGAA
GCATAATTTGTTTAAATTTCTTTGGTTCATTGAGGGACCAAAAAGGACGTAAAATTTACAGTCAATCTATGAG
GGTTTTTTTCCCTCCATAAGTTTAACTTTAAACTGTATTTAAGGAATCAAATCTTACAAAATCCTGGAAGATTT
TGGTAATGATGTTGATAATTTCAGGGAAATTAATCAAGTACCTATATTGATTTAAAAGTGTATTTTATTCAGTAG
TTTGAGG

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FIGURE 2081

AGTCTCCCCAGGTTGTAGACGCTGCGGCCCGGCCGCGGGTAAATAACAGATGCGGGTGAAAGATCCAACATAAA
GCTTTACCTGAGAAAGCCAAAAGAAGTAAAAGGCCCTACTGTACCTCATGATGAAGACTCTTCAGATGATATTGCT
GTAGGTTTAACTTGCCAACATGTAAGTCATGCTATCAGCGTGAATCATGTAAAGAGAGCAATAGCTGAGAACTGT
TGGTCAGTTTGCTCAGAAATGTTTAGAAGAAAGAAGATTCTATGATGGGCAGCTAGTACTTACTTCTGATATTTGG
TTGTGCCTCAAGTGTGGCTTCCAGGGATGTGGTAAAACTCAGAAAGCCAACATTCATTGAAGCACTTTAAGAGT
TCCAGAACAGAGCCCCATTGTATTATAATTAATCTGAGCACATGGATTATATGGTGTTATGAATGTGATGAAAAA
TTATCAACGCATTGTAATAAGAAGGTTTTGGCTCAGATAGTTGATTTTCTCCAGAAACATGCTTCTAAAAACAAA
ACAAGTGCATTTTCTAGAATCATGAACTTTGTGAAGAAAAATGTGAAACAGATGAAATACAGAAGGGAGGAAAA
TGCAGAAATTTATCTGTAAGAGGAATTACAAATTTAGGAAATACTTGCTTTTTTAAATGCAGTCATGCAGAACTTG
GCACAGACTTATACTCTTACTGATCTGATGAATGAGATCAAAGAAAGTAGTACAAAACCTCAAGATTTTTCTTCC
TCAGACTCTCAGCTGGACCCATTGGTGGTGGAACTTTCAAGGCCTGGACCACTGACCTCAGCCTTGTTCTCTGTTT
CTTCACAGCATGAAGGAGACTGAAAAAGGACCACTTTCTCCTAAAGTTCTTTTTTAAATCAGCTTTGTGAGAAGCGG
GTGCATCTACATTTAATAATAATAATTATGAGTTACAAAATACTAATGTATTTCATCATTTAACATGAATAGTCGT
TTTTACTGTAACTTTGCTCTTATTGCCCTGACTATGAAGAGAACTAAAATTTGTTACAGCTCTATGCTTTATGAA
AATTATATCTCAGTCCTCAGAAGAAGCAGCTTATCCTCATATATAAGGAAATGGAGACACAGAAATTAAATGGCT
CACCTAGTCTGAGTGAAAAGCTGAGAATCAAATGGAGATCTGTCCTGACTTGGATGCCTATGTTGTAATACCATA
AAGTGAGAAAACCATAGAGTTGTAAAACTAGAAAGTACCGTAAGATAACATCTAATCTAGCTTTCTTATTTTAA
AAGATGAGCTGTGAGGCAATAGAGTTTAAAGTGAATTTCTCAAGGTATTACAGTATGTTTAAAAACCAATCCTT
ATGTGCCTGGAAATAAACACATAAAGGATCTGACTTGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2082

MRVKDPTKALPEKAKRSKRPTVPHDEDSSDDIAVGLTCQHVSHAISVNHVKRAIAENLWSVCSECLEERRFYDGO
LVLTSDIWLCCLKCGFQGCCKNSQHSKHKFKSSRTEPHCIIINLSTWIIWCYECDEKLSTHCNKKVLAQIVDFL
QKHASKTQTSAFSRIMKLCEEKCETDEIQKGGKCRNLSVRGITNLGNTCFFNAVMQNLAQTYTLTDLMEIKESS
TKLKIFPSSDSQLDPLVVELSRPGPLTSALFLFLHSMKETEKGPLSPKVLFNQLCQKRVHLHLI

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FIGURE 2083

AGTTTGTGCTCCACCGAGTTCTGAAGAAGCCAGCAGCTCGCTGCTTAAAATTAAACCACAGGGTTCCATGAT
GGGTCAACTTGATGGGAAAGTCATCATCCTGACAGCCGCTGCTCAGGGGATTGGCCAAGCAGCTGCCTTAGCTTT
TGTAAGAGAAGGTGCCAAAGTCATAGCCACAGACATTAATGTGTCCAACTTCAGGAAGTGGAAAAGTACCTGGG
TATTCAAACTCGTGTCCTTGATGTCACAAAGAAGAAACAAATTGATCAGTTCGCCAATGAAGTTGAGAGACTTGA
TGTTCTCTTTAATGTTGCTGGTTTTGTCCATCATGGAAGTGTCTGGATTGTGAGGAGAAAGACTGGGACTTCTC
GATGAATCTCAATGTGCGCAGCACGTACCTGATGATCAAGGCATTCTTCCTAAAATGCTTGCTCAAAAATCTGG
CAATATTATCACCATGTTTTCTGTGGTTTCCAGCATCAAAGGAGTTGTGAACAGATGTGTGTACAGCACAAACCA
GGCAGCCGTGATTGGCCTCACAAAATCTGTGGCTGCAGATTTATCCAGCAGGGCATCAGGTGCAACTGTGTGTG
CCCAGGAACGGTTGATACGCCATCTCTACAAGAAAGAATACAAGCCAGAGGAAATCCTGAAGAGGCACGGAATGA
TTTCCTGAAGAGACAAAAGATGGGACGATTTGCAACTGCAGAAGAAATAGCCATGCTCTGCGTGTATGTGGCTTC
TGATGAATCTGCTTATGTAAGTGGTAACCCTGTCATCATTGATGGAGGATGGAGCTTGTGATTTTAGGATCTCCA
TGGTGGGAAGGAAGGCAGGCTCTTCCTATCCACAGTGAACCTGGCTATGAAGAAAACACCAATCATCTCCTTC
CTGCTAATCACATGTTAATGAACTAAGCCCTTTTTAACAATGTCAGTGTGCAAGAGTCTGATTCTTTAAGTA
TATTAATCTCTTTGTAATCTCTTCTGAAATCATTGTAAAGAAATAAAAATATTGAACTCACAGCAAGAGAATAGT
TTTTAAAATAAATCTCAATTTGTAAGC

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FIGURE 2084

MGQLDGKVIILTAAQIGIGQAAALAFVREGAKVIATDINVSKLQELEKYLGIQTRVLDVTKKKQIDQFANEVERL
DVLFNVAGFVHHGTVLDCEEKDWDFSMNLNVRSTYLMIKAFLPKMLAQKSGNIITMFSVSSIKGVNRCVYSTT
KAAVIGLTKSVAADFIQQGIRCNCVCPGTVDTPSLQERIQARGNPEEARNDFLKRQKMGRFATAEEIAMLCVYVA
SDESAYVTGNPVIIDGGWSL

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FIGURE 2085

ATGAA TGCTATAAAGAGATTT CAGGATGGAAAATTAGTACAGAACAAAGCCTACTGTGGAGAATCAACACCACAG
CATTTCACAGGCCTGCAGCCTTATGTGGTTAGCATGGATGAGGGTTCTTCAGGTTTCATGAGAATAGGCTATGAA
CACTGGGTTTTGGICTTCTTGATTCTCAGTGCCTGGATACCAGAAAAAGAGAAATATGAGATTGCAGAGCAGCCC
AAGATTGATCAGAAAGCTGTGGACTCACAAATTTTACCAAAAATCAAAAGTATTCCTCAGCTCCAGTGCTACCTG
CGATCTGTGTTTGCTCTGACGAATGGAATTTATCCTCACAAATTGGTGTTTTAA

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FIGURE 2086

MNAIKRFQDGKLVQNKAYCGESTPQHFTGLQPYVVSMDGSSGFMRIGYEHWVLVFLILSAWIPEKEKYEIAEQP
KIDQKAVDSQILPKIKSIPQLQCYLRSVFALTINGIYPHKLVF

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FIGURE 2087

ACAATCCAGCCAATGGCAGAAGACTGCCGGAAATGTAGAAGAGTTAAGTGTGTGTCCTATGCGTTCTACCTCAAT
 GCAGATATCAGAGTCCCTTTGAGCTCCCTGAAGAATATACTCACACCAAAGTATTACCTGCACATAGCTGCTCCC
 TTCCACCTCGCGGCAGTTCAAAATGAAGCTGTTGTCATTTCTGGAAGGAACTAGCCCAGCAGATCAAGCAGAAA
 GTGCGGCAGGAGGTGGAAGAGTGGGTGGCCTCAGGCAACAAACCTGAGCATGATCCTGTACCTGCTGCTATAGTT
 CCAGCAAAAAAGATGACTTCTTGCAGGCAAGAAGGCTCCAGCCCAGAAGGTTCTGCCCAGAAAGCCACAGGCTA
 GAGGCAGTGCCTCCTCTGAAAGCTCAGAAGTTTCAAAGCAACGTGCCCAGAAAGCATGTTGTCCAAAAGCATCT
 GGCAAGAAAGCGTTAAGAGGCTATTATAAAAGTAGTAAAGGGTCCAACAACCTTCAAGGACAAGAATGATGTATTT
 TCATCACTTGTGACTTCCGGTTTCCTAGACCAGATTTCCGGTCCGGTCTGACCAGGTGCAGCCCCATCCTAGCAGC
 AGATTGCTTGTTCTCAGCATTCCCATCATGGAGAATCTTAGTGTGGTGGGAGGCTTGGGAAATACCGTTTTCAA
 GACCAGTGGATTAGTAGCCTGAAAACTCGCCAGCAGTTGCCTGCTTTTGTTCATCTTCTGTCTCTGGAAGAGCAC
 CTGATCCTCACTACCAAAAACTAA

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FIGURE 2088

MAEDCRKCRRVKCVSYAFYLNADIRVPLSSLKNILTPKYYLHIAAPFHAAVQNEAVVISGRKLAQQIKQKVRQE
VEEWVASGNKPEHDPVPAAIIVPAKKMTSCRQEGSSPEGSCPESHRLEAVPPLKAQKFQKQRAQKACCPKASGKKA
LRGYKSSKGSNNFKDKNDVFSSLVTSGFLDQISGRSDQVQPHPSRLLVLSIPIMENLSVVGGLGNTVFKDQWI
SSLKTRQQLPAFVIFLSLEEHLILTNN

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FIGURE 2089

ACCTGATGGAGATCCAAGTGTGTTGGGCAGGATGAGATGATCGACGTCATTGGGGTGACCAAGGGCAAAGGCTACA
AAGGGGTCACCAAGTCGTTGGCACACCAAGAAGCTGCCCTGCAAGACCCACCGAGGCCTGTGCAAGGTGGCCTGTA
TTGGGGCATGGCATCCTGCTCGTGTGGCCTTCTCTGTGGCACGTGCTGGGGAGAAAGGCTACCGTCACCGCACTG
AGATCAACAAGAAGATCTATAAGATTGGCCAGGGCTACCTTATCAAGGATGGCAAGCTGATCAAGAACAATGCCT
CCACTGACTCTGACCTGTCTGACAAGAGCACCAATCCTCTGGGTGGCTTTGTCCACTATGGTGAAGTGACCAATG
ACCTTGTCATGCTGAAAGGCTGTGTGGTGGGAACCAAGAAGCGGGTGCTCACCTCCACGAGTCCTTGCTGGTGC
AGATGAAACGGCAGGCTCTGGAGAAGATTGACCTTAAGTTCATTGACACCACCTCCAAGTTTGGCCATGGCTGCT
TCCAGACCATGGAGCAGAAGAAAGCATTTCATGGGACCACTCAAGAAAGACGGAATTGCAAAGGAAGAAGGAGCTT
AATGCCAGGAACAGATTTTCGCAGCTGGTGTGGTCTCAATAAAAGTTATTTTCCACTGGGAAAAAAAAA

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FIGURE 2090

GCGTGATGTCTCACAGAAAGTTTTCTGCTCCCAGACATGGGTCCCTCGGCTTCCTGCCTCAGAAGCGCAGCAGCA
GGCATCGTGGGAAGGTGAAGAGCTTCCCTAAGGATGATCCGTCCAAGCCGGTCCACCTCACAGCCTTCCTGGGAT
ACAAAGCTGGCATGACCCACATCATGAGGGCTCTGGAGAAGATTGACCTTAAGTTCATTGACACCACCTCCAAGT
TTGGCCATGGCTGCTTCCAGACCATGGAGCAGAAGAAAGCATTTCATGGGACCACTCAAGAAAGACGGAATTGCAA
AGGAAGAAGGAGCTTAATGCCAGGAACAGATTTTCGCAGCTGGTGTGGTCTCAATAAAAGTTATTTTCCACTG

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AACAGGAAGCGGCCCTCCCGGCTTCGGAGCGCCGCCCACTCATCTCTGCCAGCTGCTGCCCTCCCCAGGAGGCC
CTCCATGGCTTACCTACCTCCACCAACCCAGCGCATGCCCACTTTGAGAGCTTCTGTCAGGCCAGCTGTGCCA
GGACGTGCTGAGCAGCTTCCAGGAGCTGTGTGGGGCCCTGGGGCTGGAACCCGGTGGGGGGCTGCCCCAGTACCA
CAAGATCAAGGACCAGCTCAACTACTGGAGCGCCAAGTCACTGTGGACCAAGCTGGACAAGCGAGCAGGCCAGCC
TGTCTACCAGCAGGGGCCGGGCTGCACCAGCACCAAGTGCTGGTGGTGGGTGCTGGACCTTGCGGGCTGCGGGT
CGCTGTGGAGCTGGCGCTGCTGGGGGCCGAGTGGTGTCTGGTGGAAAAGCGCACCAAGTTCTCTCGCCACAACGT
GCTCCACCTCTGGCCCTTACCATCCACGACCTGCGGGCACTCGGTGCTAAGAAGTTCTACGGGCGCTTCTGCAC
CGGCACCCTGGACCACATCAGCATCAGGCAGCTCCAGCTGCTTCTGCTGAAGGTAGCATTGCTGCTGGGGGTGGA
AATTCACTGGGGTGTCACTTTCACTGGCCTCCAGCCCCCTCCTAGGAAGGGGAGTGGCTGGCGTGCCAGCTCCA
ACCCAACCCCCCTGCCAGCTGGCCAATATGAATTTGACGTCTTATCTCGGCTGCAGGAGGTAAATTCGTCCC
TGAAGGCTTCAAAGTTTCGAGAAATGCGAGGCAAACCTGGCCATTGGCATCACAGCCAACCTTTGTGAATGGACGCAC
CGTGGAGGAGACACAGGTGCCGGAGATCAGTGGTGTAGCCAGGATCTACAACCAGAGCTTCTTCCAGAGCCTTCT
CAAAGCCACAGGCATTGATCTGGAGAACATTGTGTACTACAAGGACGACACCCACTACTTTGTGATGACAGCCAA
GAAGCAGTGCTGTCTGCGGCTGGGGGTGCTGCGCCAGGACTGGCCAGACACCAATCGGCTGCTGGGCAGTGCCAA
TGTGGTGCCCGAGGCTCTGCAGCGCTTTACCCGGGCAGCTGCTGACTTTGCCACCCATGGCAAGCTCGGGAACT
AGAGTTTGCCAGGATGCCCATGGGCAGCCTGATGTCTCTGCTTTGACTTCACGAGCATGATGCGGGCAGAGAG
TTCTGCTCGTGTGCAAGAGAAGCATGGCGCCCGCTGCTGCTGGGACTGGTGGGGGACTGCCTGGTGGAGCCCTT
CTGGCCCCCTGGGCACTGGAGTGGCACGGGGCTTCTTGGCAGCCTTTGATGCAGCCTGGATGGTGAAGCGGTGGGC
AGAGGGCGCTGAGTCCCTAGAGGTGTTGGCTGAGCGTGAGAGCCTGTACCAGCTTCTGTACAGACATCCCCAGA
AAACATGCATCGCAATGTGGCCCAGTATGGGCTGGACCCAGCCACCCGCTACCCCAACCTGAACCTCCGGGCAGT
GACCCCCAATCAGGTACGAGACCTGTATGATGTGCTAGCCAAGGAGCCTGTGCAGAGGAACAACGACAAGACAGA
TACAGGGATGCCAGCCACCGGGTCGGCAGGCACCCAGGAGGAGCTGCTACGCTGGTGCCAGGAGCAGACAGCTGG
GTACCCGGGAGTCCACGTCTCCGATTTGTCTTCTCTCTGGGCTGATGGGCTAGCTCTGTGTGCCCTGGTGTACCG
GCTGCAGCCTGGCCTGCTGGAACCTCAGAGCTGCAGGGGCTGGGAGCTCTGGAAGCAACTGCTTGGGCACTAAA
GGTGGCAGAGAATGAGCTGGGCATCACACCGGTGGTGTCTGCACAGGCCGTGGTAGCAGGGAGTGACCCACTGGG
CCTCATTTGCCTACCTCAGCCACTTCCACAGTGCCTTCAAGAGCATGGCCACAGCCCAGGCCCTGTGAGCCAGGC
CTCCCCAGGGACCTCCAGTGCTGTATTATTCTTTAGTAACTTCAGAGGACCCTGCAGCGATCCCGGGCCAAGGA
AAATGCAGAGGATGCTGGTGGCAAGAAGCTGCGCTTGGAGATGGAGGCCGAGACCCCAAGTACTGAGGTGCCACC
TGACCCAGAGCCTGGTGTACCCCTGACACCCCATCCCAACACCAGGAGGCCGGTGTGTTGGGACCTGTGTGCACT
TTGTGGGGAACACCTCTATGTCTCTGGAACGCCTCTGTGTCAACGGCCATTTCTTCCACCGGAGCTGCTTCCGCTG
CCATACCTGTGAGGCCACACTGTGGCCAGGTGGCTACGAGCAGCACCCAGGAGATGGACATTTCTACTGCCTCCA
GCACCTGCCCCAGACAGACCACAAAGCGGAAGGCAGCGATAGAGGCCCTGAGAGTCCGGAGCTCCCCACACCAAG
TGAGAATAGCATGCCACCAGGCCTCTCAACTCCACAGCCTCGCAGGAGGGGGCCGGTCTGTTCAGATCCAG
CCAGCCCACCCGTGGCAGATCCGCCTCTCCAGCCCGAGCGCCAGCGGTTGTCTCCCTTAACCTTACCCCTGA
CCCGGAAATGGAGCCTCCACCCAAGCCTCCCCGCAGCTGCTCCGCCTTGGCCCGCCACGCCCTGGAGAGCAGCTT
TGTGGGCTGGGGCTGCCAGTCCAGAGCCCTCAAGCTCTTGTGGCCATGGAGAAGGAGGAAAAAGAGAGTCCCTT
CTCCAGTGAAGAGGAAGAAGAAGATGTGCCTTTGGACTCAGATGTGGAACAGGCCCTGCAGACCTTTGCCAAGAC
CTCAGGCACCATGAATAACTACCCAACATGGCGTCGGACTCTGCTGCGCCGTGCGAAGGAGGAGGAGATGAAGAG
GTTCTGCAAGGCCCAGACCATCCAACGGCGACTAAATGAGATTGAGGCTGCCTTGAGGGAGCTAGAGGCCGAGGG
CGTGAAGCTGAGCTGGCCCTTGAGGCGCCAGAGCAGTTCCCCAGAACAGCAAAAGAACTATGGGTAGGACAGCT
GCTACAGCTCGTTGACAAGAAAAACAGCCTGGTGGCTGAGGAGGCCGAGCTCATGATACGGTGCAGGAATTGAA
TCTGGAGGAGAAACAGTGGCAGCTGGACCAGGATACGAGGCTACATGAACCGGGAAGAAAACCTAAAGACAGC
TGCTGATCGGCAGGCTGAGGACCAGGTCTGAGGAAGCTGGTGGATTGGTCAACCAGAGAGATGCCCTCATCCG
CTTCCAGGAGGAGCGCAGGCTCAGCGAGCTGGCCTTGGGGACAGGGGCCAGGGCTAGACAGGGGTGGGCGCTCT
GCTTTCGTTCCCACAAAGAAAGCACCTCACCCACAGCAGTGCCACCCCTGTTTCACTCTGGGCTGCCTGGCAGAGA
GCCTTGTGCTTTACAATTAAAAATGTTTCTGCCAC

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FIGURE 2092

GTTCCGGCGCACGTAATCGCCGAGGGCACGTGCATGCCCCCTGGTTAAGAGTTGCAGGTAGCGGTAGCGATGGAC
ACTCTGGATCGAGTAGTAAAGCCCCAAAACGAAAAGAGCCAAGAGATTCCTTGAGAAGAGAGAACCGAAACTCAAT
GAAAATATTAAAAATGCCATGCTGATTAAAGGGGGAAATGCAATGCAACAGTGACAAAAGTACTTAAAGATGTG
TATGCACTGAAAAAACCATACGGTGTACTATATAAAAAGAAAAATATTACAAGACCTTTTGAGGATCAGACATCA
CTGGAATTCTTTTCAAAGAAGTCAGATTGTTCTTTATTCATGTTTGGCTCCCATAATAAGAAGCGGCCAAATAAT
CTAGTAATAGGTCGTATGTATGACTACCATGTGCTGGATATGATTGAATTAGGTATTGAGAATTTTGTCTCTCTA
AAAGACATTAAGAACAGTAAATGTCCTGAGGGAACAAAACCCATGCTGATATTTGCTGGCGATGATTTTCGATGTA
ACAGAAGATTATAGAAGACTAAAAAGTCTTCTTATTGATTTCTTCAGAGGCCCCACAGTATCAAATATCCGCCTG
GCTGGATTAGAGTATGTTCTGCACTTCACTGCACTGAATGGGAAGATTTACTTTCGAAGCTATAAGTTGCTGTTG
AAGAAATCTGGTTGCAGAACACCACGGATTGAATTGGAAGAGATGGGACCCTCATTGGATCTGGTTCTGAGGAGG
ACACACCTGGCATCGGATGACCTTTATAAATTATCTATGAAAATGCCAAAAGCTCTCAAGCCAAAGAAGAAGAAA
AATATTTCCCATGATACTTTTTGGTACAACCTTATGGAAGGATTCATATGCAGAAGCAAGACCTAAGCAAACCTACAA
ACCAGGAAAAATGAAGGGGTTGAAGAAGCGACCTGCAGAAAGGATAACAGAAGACCACGAGAAAAAGTCAAAAAGA
ATTAATAAAAAATTGATGGAACCTTAGCCAGCCACTACTGTTTCATTGTGTTCTACTTAAGAGAATTATCAAGCGTC
AATCCATTTCAGAGTTTCTTATAAGATCTTATTATATATTTTTATAACATGATAATTTTACGATATATTATTATGA
ACAGTAATATACTAGTATTAAGTGTAAGTAAGCCTTTTATTTGAGACATTACACCCTGGTGTGCCATTTTCTCT
TGTGATATCCCCTGCCCTCCACAAATTCTTCTTTCTCATTGGGTGGATGGATGGGTGAGGAGGGATCTCCATAAC
CATTGGGATTTTTTTGAATTTCTGGCCTTAGCTAAAGAAAGCCACAGAAAGCCGGACCCGCAGGAGCTGTGTAAA
CAATCTCAGTATGAATTACCTGGAAAGTTAACCTCCTCTCCCAACATGGATCTACATTCTGATTTTTATTTTCTA
CTTTTATTTTGCTGAAATCCTACTCGTTGACATTTGAGATTTTAAGCTTTGTGGCTGAAAATATATAGATCTCT
GAG

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FIGURE 2093

MDTLDRVVKPKTKRAKRFLEKREPKNENIKNAMLIKGGNANATVTKVLKDVYALKKPYGVLYKKKNITRPFEDQ
TSLEFFSKKSDCSLFMFGSHNKKRPNNLVIGRMYDYHVLDMIELGIENFVSLKDIKNSKCPEGTKPMLIFAGDDF
DVTEDYRRLKSLIDFFRGPTVSNIRLAGLEYVLHFTALNGKIYFRSYKLLKKSGCRTPRIELEEMGPSLDLVL
RRTHLASDDLYKL SMKMPKALKPKKKKNISHDTFGTTYGRIHMQQDLSKLQTRKMKGLKKRPAERITEDHEKKS
KRIKKN

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FIGURE 2094

ATGGAACAGTACATCTGTAAAAGGACAAGTGATGGCATCTACATCATAAATCTGAAGAGGACCTGGGAGAAAGCTT
CTGCTGGCAGCTCATGCCATTGCTGCCATTGAAAACCCCTGCAGATGTCAGTGTTATATCCTCCAGGAATATTGGC
CAGAGGGCTGTGCTGAAGTTTGCTGCTGCCACTGGAGCCACTCCAATTGCTGGCCGCTTCACTCCTGGAACCTTC
ACTAACCAGATCCAGGCAGCTTTCTGGGAGCCACGGCTTCTTGTTGTTACTGACCCCAGGGCTGACCACCAGCCT
CTCACGGAGGCATCTTATGTTAACCTACCTACCATTGCTCTATTCTCCTTGCTATGTGGACATTGCCATCGCA
TGCAACAACAAGGGAGCTCACTCGGTGGGTTTGATGTGGTGGACACCGGCTCGGGAAGTTCTGCGCATGCGTGGC
ACCATTTCCTGCGAACACCCGTGGGAGGTCATGCCTGATCTCTACTTCTACAGAGATCCTGAAGAGATTGAAAAA
GAAGAGCAGGCTGCTGCTAAAAAAGCTGTGACCAAGAAAGAATTCAGGGTGAATGGACTGCTTCAGCTCCTGAG
TTCAGTACTCAGCCTGAGGTTGCAGACTGGTCTGAAGGCATGCAGGCCACCGAATGGGTAAAAGCAATCACT
GAATGGGTAGAAGCAACCGCTGAATGGTCTTAA

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FIGURE 2095

MEQYICKRTSDGIYIINLKRTWEKLLLAHAIAAIENPADVSVISSRNIGQRAVLKFAAATGATPIAGRFTPGTF
TNQIQAAFWEPRLLVVTDPRADHQPLTEASYVNLPTIALFSLCYVDIAIACNNKGAHSVGLMWWTTPAREVLRMRG
TISCHEPWVMPDLYFYRDPREEIEKEEQAAAKKAVTKKEFQGEWTASAPEFTATQPEVADWSEGMQATEWVKAIT
EWVEATAEWS

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FIGURE 2096

ATGGCAAAGGAAGATAACAGAAGACCCTCCAGAGAGTGGAATCCTGAAAATCAAGGAACATTTCTGTATACTCAA
GTGAATGGGAAAGTGGAATATTTCTGAAGTGGAAGGGATTTACAGATGCTGACAATACTTGGGAACCTGAAGAA
AATTTAGATTGTCCAGAATTGATTGAAGCATTTCTTAGCTCTCAGAAAGCTGGCAAACAAAAAGATGACAGCAGT
GGAGAATTGATGTTTCTCATGAAATGGAAAGATTGAGATGAGGCAGACTTGGTGCTGGCAAAGAAGCAAGTATG
AAGTGTCCTCAAATTGTAATTGCTTTTTATGAAGAGAGACTAACTTGGCATTCTTGTCCAGAAGATGAAGCTCAA
TAA

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FIGURE 2097

MAKEDNRRPSREWNPENQGTFLYTQVNGKVEYFLKWKGFTDADNTWEPEENLDCPELIEAFLSSQKAGKQKDDSS
GELMFLMKWKDSDEADLVLAKEASMKCPQIVIAFYEEERLTWHSCPEDEAQ

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FIGURE 2098

CTCTTCCGGTTCTAGGCACTTCGGGAGCCGCGGCTTATGGTGCAGACATGGCCAAGTCCAAGAACCACACCACAC
ACAACCAGTCCCGAAAAATGGCACAGAAATGGTATCAAGAAACCCCGATCACAAAGATACGAATCTCTTAAGGGGG
TGGACCCCAAGTTCCTGAGGAACATGCGCTTTGCCAAGAAGCACAAACAAAAAGGGCCTAAAGAAGATGCAGGCCA
ACAATGCCAAGGCCATGAGTGACGTGCCGAGGCTATCAAGGCCCTCGTAAAGCCCAAGGAGGTAAAGCCCAAGA
TCCCAAAGGGAGTCAGCTGCAAGCTCGATCGACATGCCTACGTTGCCACCCCAAGCTTGGGAAGCGTGCTCTTG
CCCGTATTGCCAAGGGGCTCAGGCTGTGCCGGCCAAAGGCCAAGGCCAAGGCCAAGGATCAAA^bCAAGGCCCAGG
CTGCAGCTCCAGCTTCAGTTCCAGCTCAGGCTCCCAAAGGTACCCAGGCCCTACAAAGGCTTCAGAGTAGATAT
CTCTGCCAACATGAGGACAGAAGGACTGGTGCGACCCCCACCCCCACCCCTGGGCTATCATCTGCATGGGGCTG
GGGTCTCTGTGCTATTTGTACAAATAAACCTGAGGCAGG

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FIGURE 2099

ACAAAAAGCTTTTACGAGGTATCAGCACTTTTCTTTCATTAGGGGGAAGGCGTGAGGAAAGTACCAAACAGCAG
CGGAGTTTTAACTTTAAATAGACAGGTCTGAGTGCCTGAACTTGCCTTTTCACTTTTACTTCATCCTCCAAGGAG
TTCAATCACTTGGCGTGACTTCACTACTTTTAAAGCAAAAGAGTGGTGCCAGGCAACATGGGTGACTGGAGCGCC
TTAGGCAAACTCCTTGACAAGGTTCAAGCCTACTCAACTGCTGGAGGGAAGGTGTGGCTGTCAGTACTTTTCATT
TTCCGAATCCTGCTGCTGGGGACAGCGGTTGAGTCAGCCTGGGGAGATGAGCAGTCTGCCTTTTCGTTGTAACACT
CAGCAACCTGGTTGTGAAAATGTCTGCTATGACAAGTCTTTCCCAATCTCTCATGTGCGCTTCTGGGTCTGCAG
ATCATATTTGTGTCTGTACCCACACTCTTGTACCTGGCTCATGTGTTCTATGTGATGCGAAAGGAAGAGAACTG
AACAAGAAAGAGGAAGAACTCAAGGTTGCCCAAATGATGGTGTCAATGTGGACATGCACTTGAAGCAGATTGAG
ATAAAGAAGTTCAAGTACGGTATTGAAGAGCATGGTAAGGTGAAAATGCGAGGGGGTTGCTGCGAACCTACATC
ATCAGTATCCTCTTCAAGTCTATCTTTGAGGTGGCCTTCTTGTGATCCAGTGGTACATCTATGGATTTCAGCTTG
AGTGCTGTTTACACTTGCAAAAGAGATCCCTGCCACATCAGGTGGACTGTTTCTCTCTCGCCCCACGGAGAAA
ACCATCTTCATCATCTTCATGCTGGTGGTGTCTTGGTGTCCCTGGCCTTGAATATCATTGAACCTCTTCTATGTT
TTCTTCAAGGGCGTTAAGGATCGGGTTAAGGGAAAGAGCGACCCCTTACCATGCGACCAGTGGTGCCTGAGCCCT
GCCAAAGACTGTGGGTCTCAAAAATATGCTTATTTCAATGGCTGCTCCTCACCAACCGCTCCCTCTCGCCTATG
TCTCCTCTGGGTACAAGCTGGTTACTGGCGACAGAAACAATTCTTCTTGCCGCAATTACAACAAGCAAGCAAGT
GAGCAAACTGGGCTAATTACAGTGCAGAACAAAATCGAATGGGGCAGGCGGGAAGCACCATCTCTAACTCCCAT
GCACAGCCTTTTGATTTCCCGATGATAACCAGAATTCTAAAAAACTAGCTGCTGGACATGAATTACAGCCACTA
GCCATTGTGGACCAGCGACCTTCAAGCAGAGCCAGCAGTCTGTCAGCAGCAGACCTCGGCCTGATGACCTGGAG
ATCTAGGATACAGGCTTGAAAGCATCAAGATTCCACTCAATTGTGGAGAAGAAAAAGGTGCTGTAGAAAGTGCAC
CAGGTGTTAATTTTGATCCGGTGGAGGTGTTACTCAACAGCCTTATTCATGAGGCTTAGAAAACACAAAGACATT
AGAAATACCTAGGTTCACTGGGGGTGTATGGGGTAGATGGGTGGAGAGGGAGGGGATAAGAGAGGTGCATGTTGGT
ATTTAAAGTAGTGGATTCAAAGAACTTAGATTATAAAATAAGAGTTCATTAGGTGATACATAGATAAGGGCTTTT
TCTCCCCGCAAAACACCCCTAAGAATGGTTCTGTGTATGTGAATGAGCGGGTGGTAATTGTGGCTAAATATTTTGT
TTTTACCAAGAACTGAAATAATTCTGGCCAGGAATAAAATACTTCTGAACATCTTAGGTCTTTTCAACAAGAAA
AAGACAGAGGATTGTCCTTAAGTCCCTGCTAAAACATTCCATTGTTAAATTTGCACTTTGAAGGTAAGCTTTCT
AGGCCTGACCCTCCAGGTGTCAATGGACTTGTGCTACTATATTTTTTTTATTCTTGGTATCAGTTTAAAATTCAGA
CAAGGCCACAGAATAAGATTTTCCATGCATTTGCAAAATACGTATATTCTTTTCCATCCACTTGCACAATATCA
TTACCATCACTTTTTTCATCATTCCCTCAGCTACTACTCACATTCAATTAATGGTTTCTGTAAACATTTTTAAGACA
GTTGGGATGTCATTAACTTTTTTTTTTTTTGAGCTAAAGTCAGGGAATCAAGCCATGCTTAATATTTAACAATC
ACTTATATGTGTGTCGAAGAGTTTGTGTTTGTGTCATGTATTGGTACAAGCAGATACAGTATAAACTCACAAAC
ACAGATTTGAAAATAATGCACATATGGTGTCAAATTTGAACCTTTCTCATGGATTTTGTGGTGTGGGCCAATA
TGGTGTTTACATTATATAATCCTGCTGTGGCAAGTAAAGCACACTTTTTTTTTCTCTAAATGTTTTTCCCTG
TGTATCCTATTATGGATACTGGTTTTGTTAATTATGATTCTTTATTTTCTCTCTTTTTTAGGATATAGCAGTA
ATGCTATTACTGAAATGAATTTCTTTTTCTGAAATGTAATCATTGATGCTTGAATGATAGAATTTTAGTACTGT
AAACAGGCTTTAGTCATTAATGTGAGAGACTTAGAAAAATGCTTAGAGTGGACTATTAAATGTGCCTAAATGAA
TTTTGCAGTAACTGGTATTCTTGGGTTTTCTTACTTAATACACAGTAATTCAGAACTTGTATTCTATTATGAGTT
TAGCAGTCTTTTGGAGTGACCAGCAACTTTGATGTTTGCCTAAGATTTTATTTGGAATGCAAGAGAGGTTGAAA
GAGGATTCAGTAGTACACATACTAATTTATTTGAACTATATGTTGAAGACATCTACCAGTTTCTCCAAATGC
CTTTTTTAAACTCATCACAGAAGATTGGTGAAAATGCTGAGTATGACACTTTTCTTCTTGCATGCATGTCAGCT
ACATAAACAGTTTTGTACAATGAAAATTACTAATTTGTTTGACATTCCATGTTAAACTACGGTCATGTTTCAGCTT
CATTGCATGTAATGTAGACCTAGTCCATCAGATCATGTGTTCTGGAGAGTGTCTTTATTCAATAAAGTTTTAAT
TTAGTATAAACAT

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FIGURE 2100

MGDWSALGKLLDKVQAYSTAGGKVWLSVLFIFRILLLGTAVESAWGDEQSAFRCNTQQPGCENVCYDKSFPI SHV
RFWVLQIIFVSVPTLLYLAHVFYVMRKEEKLNKKEEELKVAQTDGVNVDMHLKQIEIKKFKYGIEEHGKVKMRGG
LLRTYIISILFKSIFEVAFLLIQWYIYGFSLSAVYTCKRDPCPHQVDCFLSRPTEKTIFIIFMLVVSLSLALNI
IELFYVFFKGVKDRVKGKSDPYHATSGALSPAKDCGSQKYAYFNGCSSPTAPLSPMSPPGYKLVTGDRNNSSCRN
YNKQASEQNWANYSAEQNRMGQAGSTISNSHAQPFDFPDDNQNSKKLAAGHELQPLAIVDQRPSSRASSRASSRP
RPDDLEI

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FIGURE 2101

GCTGTGCGTCCGGAAGTGTCTCGCAGATAGTAAATAATCTCGGAAAGGCGAGAAAGAAGCTGTCTCCATCTTGTC
TGTATCCGCTGCTCTTTGTGACGTTGTGGAGATCGGGGAGCGTCTGGGGCTGTGCTCCATGGCGAGCTGGATACCA
TGTTTGTGTGGAAGTGCCCGTGTTTGTATGCCGATGCTGTCCTAGTGGAACAACCTCCACTGTAAC TAGATTG
ATCTATGCACTTTTCTTGCTTGTGGAGTATGTGTAGCTTGTGTAATGTTGATACCAGGAATGGAAGAACAAC TG
AATAAGATTCTGGATTTTGTGAGAATGAGAAAGGTGTTGTCCCTTGTAACATTTTGGTTGGCTATAAAGCTGTA
TATCGTTTGTGCTTTGGTTTGGCTATGTTCTATCTTCTCTCTTTACTAATGATCAAAGTGAAGAGTAGCAGT
GATCCTAGAGCTGCAGTGCACAATGGATTTTGGTTCTTTAAATTTGCTGCAGCAATTGCAATTATTATTGGGGCA
TTCTTCATTCCAGAAGGAACCTTTTACAACGTGTGTGGTTTTATGTAGGCATGGCAGGTGCCTTTTGTTCATCCTC
ATACAAC TAGTCTTACTTATTGATTTTGCACATTCATGGAATGAATCGTGGGTTGAAAAATGGAAGAAGGGAAC
TCGAGATGTTGGTATGCAGCCTTGTTATCAGCTACAGCTCTGAATTATCTGCTGTCTTTAGTTGCTATCGTCTG
TTCTTTGTCTACTACACTCATCCAGCCAGTTGTTCCAGAAAACAAGGCGTTCATCAGTGTCAACATGCTCCTCTGC
GTTGGTGCTTCTGTAATGTCTATACTGCCAAAAATCCAAGAATCACAACCAAGATCTGGTTTGTACAGTCTTCA
GTAATTACAGTCTACACAATGTATTTGACATGGTCAGCTATGACCAATGAACCAGAAAACAATTGCAACCCAAAGT
CTACTAAGCATAATTGGCTACAATAACAAGCACTGTCCCAAAGGAAGGCGAGTCCAGTGGTGGCATGCT
CAAGGAATTATAGGACTAATTCTCTTTTGTGTGTGTATTTTATCCAGCATCCGTACTTCAAACAATAGTCAG
GTTAATAAACTGACTCTAACAAGTGATGAATCTACATTAATAGAAGATGGTGGAGCTAGAAGTGATGGATCACTG
GAGGATGGGGACGATGTTACCGAGCTGTAGATAATGAAAGGGATGGTGTCACTTACAGTTATTCTCTTTTCAC
TTCATGCTTTTCTGGCTTCACCTTTATATCATGATGACCCCTTACCAACTGGTACAGGTATGAACCCCTCTCGTGAG
ATGAAAAGTCAGTGGACAGCTGTCTGGGTGAAAATCTCTTCCAGTTGGATTGGCATCGTGCTGTATGTTTGGACA
CTCGTGGCACCACCTTGTTCTTACAAATCGTGATTTTGACTGAGTGAGACTTCTAGCATGAAAGTCCACCTTGAT
TATTGCTTATTTGAAAACAGTATTTCCCACTTTTGTAAAGTTGTGTATGTTTTTGCTTCCCATGTAACCTCTCCA
GTGTTCTGGCATGAATTAGATTTTACTGCTTGTCAATTTTGTATTTTCTTACCAAGTGCATTGATATGTGAAGTA
GAATGAATTGCAGAGGAAAGTTTATGAATATGGTGATGAGTTAGTAAAAGTGGCCATTATTGGGCTTATTCTCT
GCTCTATAGTTGTGAAATGAAGAGTAAAAACAAATTTGTTTGACTATTTTAAAATTATATTAGACCTTAAGCTGT
TTTAGCAAGCATTAAAGCAAATGTATGGCTGCCTTTTGAATATTTGATGTGTTGCCTGGCAGGATACTGCAAAG
AACATGGTTTTATTTTAAAATTTATAAACAAGTCACCTTAAATGCCAGTTGTCTGAAAAATCTTATAAGGTTTTACC
CTTGATACGGAATTTACACAGGTAGGGAGTGTTTAGTGGAACAATAGTGAGGTTATGGATGGAGGTGTCGGTACT
AAATTGAATAACGAGTAAATAATCTTACTTGGGTAGAGATGGCCTTTGCCAACAAAGTGAAGTGTGTTGGTTGTT
TTAAACTCATGAAGTATGGGTTCACTGGAAATGTTTGAAGTCTGAAGGATTTAGACAAGGTTTTGAAAAGGATA
ATCATGGGTTAGAAGGAAGTGTGTTGAAAGTCACCTTGAAGTTAGTTTTGGGCCAGCACGGTAGCTCACCCTTGT
AATCCCAGCACTTTGGGAGGCTGAGGTGGGTAGATTACTTGAGCCCAGGAATCAAGACCAGCCTGGGCAACATG
GTGAAACCCCTGTTTCTATAAAAAATAATCTGGGCTTTGTAGCATATGCCTGTGGTCCCAGCTACTGAGGAGGCTG
AGGTGGGAGGATTGCTTGAGCCCAGGAGGCAGAGGTTGCAGTGAGCCAAGGTCACGTCACCTGCACTCTAGCCTGG
GCAACAGAGTAAGACAAAAAATATATATATATTGAAAATCAAAGGAGGCAAAATTTTGACAGGGGAAGGAAGTAA
CTGCAAAACACTAGGCTTTAGTAGGTACTTATATAAAATCTAGTCCAGTTCTCTCATTTAAAAAATGAAGACAC
TGAAATACAGACTTAAATAGCTCAGATAGCTAATTAGGAAATTTCAAGTTGGCCAATAATAGCATTCTCTCTGAC
ATTTAAAAATAATTTCTATTCAAATACATGCATAATTGATTTTACACCTCATTACTGGTGGATAATTTATGTGA
TGTGGATTGCTGGTGTCCAGCATGACCCATAAACAGGTGAGAAGAATGATGGAATGTTTTAGAATAAACTCCTGC
TTATAGTATACTACACAGTTCAAAGATGTTTAAATGCTTTTGTATTTTACTGCCATGTAATTGAAATATATAGA
TTATTGTAACCTTTCAACCTGAAAATCAAGCAGTATGAGAGTTTAGTTATTTGTATGTGTCACTAGTGTCTAATG
AAGCTTTTAAATCTACAATTTCTCTTTAAAAATATTTATTAATGTGAATGGAATATAACAATTCAGCTTAATT
CCCCAACCTTATTCTGTGTGTAGACATTGTATTCCACAATTTTGAATGGCTGTGTTTTACCTCTAAATAAATGAA
TTCAGAG

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FIGURE 2102

MGSVLGLCSMASWIPCLCGSAPCLLCRCCPSGNNSTVTRLIYALFLLVGVCVACVMLIPGMEEQLNKIPGFCENE
KGVVPCNILVGKAVYRLCFGLAMFYLLLSLLMIKVKSSDPRAAVHNGFWFFKFAAAIAIIIGAFFIPEGTFTT
VWFYVGMAGAFCFILIQVLVLLIDFAHSWNEVVEKMEEGNSRCWYAALLSATALNYLLSLVAIVLFFVYYTHPAS
CSENKAFISVNMLLCVGASVMSILPKIQESQPRSGLLQSSVITVYTMYLTSAMTNEPETNCNPSLLSIIGYNTT
STVPKEGQSVQWWHAQGIIGLILFLLCVFYSSIRTSNNSQVNKLTLTSDESTLIEDGGARSDGSLEDGDDVHRAV
DNERDGVITYSYFFHFMLFLASLYIMMILTNNWYRYEPSREMKSQWTAVVVKISSWIGIVLYVWTLVAPLVLTNR
DFD

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FIGURE 2103

GGGGACCTCTCCTGACGCTGCGCTCTCTGCGAGGCAACCTTTACGTCCATCGCTTGTTCATCTTAGGATCCCCA
TGTTATTTTAGCCCAGATTGGCTAGTTCTGGGGAGGCAGCATGGTGGGACGATTCTGTCCCGAGTCCCCGCCAGG
CTTTGTTTCGGGTGCGCCGCTACCAGCGCGGTCTCCCTAGATCCTCCATCCGGGGAACCTCGCCCCGGGTGCGGGTA
CCCCGGGCGCGCAGCGCTGCCTCGAGGGTGTATGGATGCACCGCGCGCGGCGAGAGAGACCGGGGGCTGGGCCTG
GGAGACCTTAGCGGGGGCGGGGGCGAAGAAGAGATTTATTCCAGTGAAACAACAAGTGAAGTCAAGTAAGTCC
TCCCAGAGTACTTCCAAGTCTGGGTGGCCCCAAATCCAAGTAAATGCCACCACCAAGGCGGCTGGTGGTGCCTG
CAGTCAACAGCCAGTCTCTTCGTGGTCTCACTCTCTCTCTGTCATCTCTACTCTTAAGAGACTCAGGCCAAGAAA
CGTCTTCTAAATTTCCCCATCTTCTAAACCCAATCCAAGTGGCGTCTGGAAGTCCAATGTGGCAAGGAAAAACAG
GTCTTTCATCGAATCTACTAATTCACACCTTTTATTGACACAGAAAAATGTTGAGAATCCCAAATTTGATTGATTT
GAAGAACATGTGAGAGGTTTGAAGTATGATGGATGCCAATATTAATCTGCTGGAGTTTCATGTACAAGATGAA
GGAGAGGCAACATCCAAAATAGTTAAGACATGATTTCTTGAATGTGGCTTGAGAAATATGGACACTTAATACTA
CCTTGAAAAATAAGAATAGAAATAAAGGATGGGATTGTGGAATGGAGATTGAGTTTTCATTGTTTCATTAATCT
ATAAGGCCATAAAACAGGTAATATAAAAAGCTTCCATGATTCTATTTATATGTACATGAGAAGGAAGTTCAGGT
GTTACTGTAATTCCTCAACGTATTGTTTCGACAGCACTAATTTAATGCCGATATACTCTAGATGAAGTTTTACAT
TGTTGAGCTATTGCTGTTCTCTTGGGAAGTGAAGTCACTTTCTCTGAGGCTTTGGATTGACATTGCATTTGA
CCTTTTATGTAGTAATTGACATGTGCCAGGGCAATGATGAATGAGAATCTACCCCGAGATCCAAGCATCTGAGC
AACTCTTGATTATCCATATTGAGTCAATGGTAGGCATTTCTATCACCTGTTTCCATTCAACAAGAGCACTACA
TTCATTTAGCTAAACGGATTCCAAAGAGTAGAATGCATTGACCACGACTAATTTCAAAATGCTTTTTATTATTA
TTATTTTTTAGACAGTCTCACTTTGTGCGCCAGGCGGAGTGCAGTGGTGCGATCTCAGATCAGTGTACCATTG
CCTCCCGGGCTCAAGCGATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGGCACCTGCCACCATGCCCG
GCTAATTTTTGTAATTTTAGTAGAGACAGGGTTTCACCATGTTGCCAGGCTGGTTTCGAAGTCTGACCTCAGG
TGATCCACCCGCTCGGCCTCCCAAAGTGCTGGGATTACAGGCTTGAGCCCCGCGCCAGCCATCAAAATGCTT
TTTATTTCTGCATATGTTGAATACTTTTACAAATTAAAAAAATGATCTGTTTGAAGGCAAAATGCAAATCTT
GAAATTAAGAAGGCAAAATGTAAAGGAGTCAAACTATAAATCAAGTATTTGGGAAGTGAAGACTGGAAGCTAA
TTTGCAATTAATTCACAACTTTTATACTCTTCTGTATATACATTTTTTTCTTTAAAAAACAAGTATGGATCA
GAATAGCCACATTTAGAACACTTTTTGTTATCAGTCAATATTTTAGATAGTTAGAACCTGGTCTTAAGCCTAAA
AGTGGGCTTGATTCTGCAGTAAATCTTTTACAAGTGCCTCGACACACATAAACCTTTTTAAAAATAGACACTCCC
CGAAGTCTTTTGTTCGATGGTCACACACTGATGCTTAGATGTTCCAGTAATCTAATATGGCCACAGTAGTCTTG
ATGACCAAAGTCCTTTTTTTCCATCTTTAGAAAAGTACATGGGAACAAACAGATCGAACAGTTTTGAAGCTACTG
TGTGTGTGAATGAACACTCTTGCTTTATCCAGAATGCTGTACATCTATTTGGATTGTATATTGTGTTTGTGTA
TTTACGCTTTGATTATAGTAACTTCTTATGGAATTGATTGTCATTGAACACAACTGTAAATAAAAAGAAA

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FIGURE 2104

CAGAAGCGGCTAGTGGCGGCTGCCTGCGTCCCCAACCCCTCCGCGCAGCGCTCGCGACACGCGTGCCAGGAGTG
GGAGCGAGCGGCGGGGCCAGCTGCGTTCTGAGCCTGGGCGCAGCTGCCATCTGCTCTGGGAAGCACCAGGGTGTC
CCCGCCGCCCTCAGCTCGAAGTCAGCCACCATGGAGGCGCAGGCACAAGGTTTGTTGGAGACTGAACCGTTGCAA
GGAACAGACGAAGATGCAGTAGCCAGTGCTGACTTCTCTAGCATGCTCTCTGAGGAGGAAAAGGAAGAGTTAAAA
GCAGAGTTAGTTCAGCTAGAAGACGAAATTACAACACTACGACAAGTTTTGTCAGCGAAAAGAAAGGCATCTAGTT
GAGATAAAACAAAAACTCGGCATGAACCTGATGAATGAATTAACAGAACTTCAGCAAAAGCTGGCATGACATG
CAGACTACCACTGCCTACAAGAAAACACATGAAACCCTGAGTCACGCAGGGCAAAAGGCAACTGCAGCTTTCAGC
AACGTTGGAACGGCCATCAGCAAGAAGTTCGGAGACATGAGTTACTCCATTGCGCCATTCCATAAGTATGCCTGCT
ATGAGGAATTCTCCTACTTTCAAATCATTTGAGGAGAGGGTTGAGACAACCTGTCACAAGCCTCAAGACGAAAGTA
GGCGGTACGAACCCTAATGGAGGCAGTTTTGAGGAGGTCTCAGCTCCACGGCCCATGCCAGTGCCCAGAGCTTG
GCAGGAGGCTCCCGGCGGACCAAGGAGGAGGAGCTGCAGTGCTTAAGTCCAGCCAGCGTGTCAGCTGCATCCAGAAA
CCGGCCACTACCCAGCCCATCTCTGCCTGTGCTTATCCAGATAAGAAGACCAAAATCCCGCTGGGAAAAACCCAG
GCCTTGACATTGTTATTCAAATGGCCCCCTCCAGAAAGTTAATGATTTCCATTGTATTGTGTTGATGATGGAC
CACTTGACCATCACATTTAGTATTCATAGATGACTGTCACATTTTAAATGTTCCCACTTGAGCAGGTACACAA
CTGGTCATAATTCCTGTCTGTGTAATTCGATGTATATTTTCCAAACATGTAGCTATTGTTTGCTTTGATTTTG
CTTGGCCTCCTTTATGATGTGCATGTCCTTGAAGGCTGAATGAACAGTCCCTTTCAGTTCAGCAGATCAACAGGA
TGGAGCTCTTCATGACTGTCTCCAGCAATAGGATGATTTACTATAAATTTATCCAACACTACTTGTGATCTCTCTC
ACCTACATCAATTATGTATGTTAATTTAGCAATTAAGAATTGATTTT

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FIGURE 2105

MEAQAQGLLETEPLQGTDEDAVASADFSSMLSEEEKEELKAELVQLEDEITTLLRQVLSAKERHLVEIKQKLG MNL
MNELKQNF SKSWHDMQTTTAYKKTHETLSHAGQKATAAFSNVGTAI SKKFGDMSYSIRHSISMPAMRNSPTFKSF
EERVETT V TSLKTKVGGTNPNGGSFEEVLSSTAHA SAQSLAGGSRR TKEEELQC

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FIGURE 2106

GGAGTTGGAAGGGGAGGAGGAAGAGGGGGAGCAGGAAGAGGGGCAGAAGGAAGAAGAAGAGGGGGAGGAGAAAGA
GATAGAAGAGTAAGAGGAGGGGGAAAGAAAGACAAGGGGAAGGGGAGGAGGAGGAGGACGGGGAGGAGCTTCGCCG
CGGCCTGCTCCGCCACGCCGGGTCGGTGGCCGCATGGCTTCGGTCTCCTCTGCGACCTTCTCGGGCCACGGGGC
TCGGTCCCTACTGCAGTTCCTGCGGCTGGTAGGGCAGCTCAAGAGAGTCCCACGAACTGGCTGGGTATACAGAAA
TGTCCAGAGGCCGGAGAGCGTTTCAGATCACATGTACCGGATGGCAGTTATGGCTATGGTGATCAAAGATGACCG
TCTTAACAAAGACCGATGTGTACGCCTAGCCCTGGTTCATGATATGGCAGAATGCATCGTTGGGGACATAGCACC
AGCAGATAACATCCCCAAAGAAGAAAAACATAGGCGAGAAGAGGAAGCTATGAAGCAGATAACCCAGCTCCTACC
AGAGGACCTCAGAAAGGAGCTCTATGAACCTTTGGGAAGAGTACGAGACCCAATCTAGTGCAGAAGCCAAATTTGT
GAAGCAGCTAGACCAATGTGAAATGATTCTTCAAGCATCTGAATATGAAGACCTTGAACACAAACCTGGGAGACT
GCAAGACTTCTATGATTCCACAGCAGGAAAATTCATCACCCCTGAGATAGTCCAGCTTGTTTCTGAACCTTGAGGC
AGAAAGAAGCACTAACATAGCTGCAGCTGCCAGTGAGCCACACTCCTGAGACACTCTCTAAATTGCTGCACCTCCT
GTAACAAACATTATTTTTCCATTTTCATTGTATTGTGTTTTGCCATTGTTGGTCTGTTGATTTCCTTAGATGTGAG
TCTGTTTGTTTTCAATTGTCTGAACCTTCAGCAAGAAATGTGATACAACTTGGGCACTAAAAGAAGCCACAGAACA
GGAAGCGGTCATGAAAGTGCCATGGATGAACACTGGAGGTGGCAGTGCCTGTTTATGAACATAAATAAATAATAT
TAAACACCTAAATATTAGAATATTTATTGGAGATTTAAATCATCTTATTCTGACTTAATTACCGATATCCCCG
AAGGCTAGGTTTCATTGAATAATAGAAAATTTCAATTATGATTGCTTTTAAGAACAGATTCTTCAGCTGATTTAGTG
ATAAGAATCCAGAAAAGAAAATGTACTAGTGATGTATTCTCTCCCCAGATGAAATTGCTGCCTTATTCAGATTTA
CTCTCTTGAGCCAGATTTTGAATTTCACTGCAGACTGCTTCAGACTTCTAATCATAGGCTTGTAACCTACTAAT
AGGCTCTGCCCCCTCTTCCCAATACTTTTGTCAATTTAGAGATATAAACCGGGGCATATAAAAAATGCAACTTGTAT
TCCTTTGTATATTTTTCCCTGTCTGACTTATAAATCTTGAGACCTTTATTGTAAAAGCATGTATCATCAGGTGAG
AAATATAAATAGGAAGTGGGGTCATTGAGCCTCAGGTAGGGAATATATCAACCCGATTCTCTCTCTTTTCCC
TTTTATAGGATAAATAATCC

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FIGURE 2107

GACGGCAGCCGCCCGGCCGACAGCCCCGAGACGACAGCCCGGCGCGTCCCGGTCCCCACCTCCGACCACCGCCA
GCGCTCCAGGCCCGCCGCTCCCCGCTCGCCGCCACCGCGCCCTCCGCTCCGCCCGCAGTGCCAACCATGACCGC
CGCCAGTATGGGCCCCGTCCGCGTCGCCTTCGTGGTCTCTCTCGCCCTCTGCAGCCGGCCGGCCGTGCGCCAGAA
CTGCAGCGGGCCGTGCCGGTGCCCGGACGAGCCGGCGCCGCGCTGCCCGGCGGGCGTGAGCCTCGTGCTGGACGG
CTGCGGCTGCTGCCGCGTCTGCGCCAAGCAGCTGGGCGAGCTGTGCACCGAGCGCGACCCATGCGACCCGCACAA
GGGCCTATTCTGTCACTTCGGCTCCCCGGCCAACCGCAAGATCGGCGTGTGCACCGCCAAAGATGGTGCTCCCTG
CATCTTCGGTGGTACGGTGTACCGCAGCGGAGAGTCTTCAGAGCAGCTGCAAGTACCAGTGACGTCGCTGGA
CGGGGCGGTGGGCTGCATGCCCCGTGTGCAGCATGGACGTTCTGTGCCAGCCCTGACTGCCCTTTCCCGAGGAG
GGTCAAGCTGCCCGGGAAATGCTGCGAGGAGTGGGTGTGTGACGAGCCCAAGGACCAAAACCGTGGTTGGGCTGC
CCTCGCGGCTTACCGACTGGAAGACAGTTTGGCCAGACCCAACTATGATTAGAGCCAACTGCCTGGTCCAGAC
CACAGAGTGGAGCGCCTGTTCCAAGACCTGTGGGATGGGCATCTCCACCCGGGTTACCAATGACAACGCCTCCTG
CAGGCTAGAGAAGCAGAGCCGCTGTGCATGGTCAGGCCTTGCGAAGCTGACCTGGAAGAGAACATTAAGAAGGG
CAAAAAGTGATCCGTACTCCCAAAATCTCCAAGCCTATCAAGTTTGTAGCTTTCTGGCTGCACCAGCATGAAGAC
ATACCGAGCTAAATTCTGTGGAGTATGTACCGACGGCCGATGCTGCACCCCCACAGAACCACCACCCTGCCGGT
GGAGTTCAAGTGCCCTGACGGCGAGGTCATGAAGAAGAACATGATGTTTCATCAAGACCTGTGCCTGCCATTACAA
CTGTCCCGGAGACAATGACATCTTTGAATCGCTGTACTACAGGAAGATGTACGGAGACATGGCATGAAGCCAGAG
AGTGAGAGACATTAACCTCATTAGACTGGAACCTGAACTGATTACATCTCATTTTTCCGTAAAAATGATTTTCACT
AGCACAAGTTATTTAAATCTGTTTTTCTAACTGGGGGAAAAGATTCCCACCCAATTCAAAACATTGTGCCATGTC
AAACAAATAGTCTATCAACCCAGACACTGGTTTGAAGAATGTTAAGACTTGACAGTGGAACCTACATTAGTACAC
AGCACCAGAAATGTATATTAAGGTGTGGCTTTAGGAGCAGTGGGAGGGTACCAGCAGAAAGGTTAGTATCATCAGA
TAGCATCTTATACGAGTAATATGCCTGCTATTTGAAGTGTAATTGAGAAGGAAAATTTTAGCGTGCTCACTGACC
TGCCTGTAGCCCCAGTGACAGCTAGGATGTGCATTCTCCAGCCATCAAGAGACTGAGTCAAGTTGTTTCTTAACT
CAGAACAGCAGACTCAGCTCTGACATTCTGATTGCAATGACACTGTTTCAAGGAATCGGAATCCTGTGATTAGACT
GGACAGCTTGTGGCAAGTGAATTTGCCTGTAACAAGCCAGATTTTTTAAAATTTATATTGTAAATATTGTGTGTG
TGTGTGTGTGTATATATATATATATATGTACAGTTATCTAAGTTAATTTAAAGTTGTTTGTGCCTTTTTATTTTT
GTTTTTAATGCTTTTGATATTTCAATGTTAGCCTCAATTTCTGAACACCATAGGTAGAATGTAAAGCTTGTCTGAT
CGTTCAAAGCATGAAATGGATACTTATATGGAAATTTCTGCTCAGATAGAATGACAGTCCGTCAAACAGATTGTT
TGCAAAGGGGAGGCATCAGTGTCCTTGGCAGGCTGATTTCTAGGTAGGAAATGTGGTAGCCTCACTTTTAAATGAA
CAAAATGGCCTTTTATTAATAAACTGAGTGACTCTATATAGCTGATCAGTTTTTTTACCTGGAAGCATTGTTTCTAC
TTTGATATGACTGTTTTTTCGGACAGTTTTATTGTTGAGAGTGTGACCAAAAGTTACATGTTTGCACCTTTCTAGT
TGAAAAATAAGTGTATATTTTTTCTATAAA

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FIGURE 2108

CACTGCTGACATAACTCCCTTGGTCTTCAATTTAATAGTTGTTAAGTTTTTGCCACATTGCATATGCCTTTCAT
TTATAATTTATTTACCCTGCTTGACTTAGTTTTGGGAATTCGTAAATTTAAAGGTGTGTGATTCTGTTTGCATC
TCCCTGTCACGTGTGACACACCTAGATGTGTGTTACTTCAATTTAAATTTCTCAAATTTAATTTTGATTGCTTCAG
CAGGGAAAATATTCTCAATAATGTAAATAATTAAGGTCTATACATGGGTTGTATTTTTCTGGTTCACAACAGCA
CAAAGTGTCTTTCAATTTTTTIGTTGGTTTTCTTTTAAGATCTTTTTTACCCTGAAGTCGGTGAATACTTTTCTAG
TTTATTTGATACTCTTTCTGTGTATATATTAAGCTTTTGCTGTAGATTGCCTAGTAAAATTACTAAGGATAGGTT
GTTTTACATATGGTCTATTTAAGTCTGATGTTTACGGGGGAAAGTGTAGTTACTAAAAATGTTTAACATAATTT
GGAAGAAGAGTATGAACAACCAATACCAATACCTATTGCGTTTGGATTCTTAAGACCCAGTTTGTTATTCCACT
AACTAGTTATCTTAACCATATCATCTGGTTTTTGTTGGGCCATTATTTACCTTCCCTTATGTCTTATAGAATAATG
GTTAATATTTTTAGGTCAAAATTAATTTTGGAAAGTAACTTTCCACAATTAAGTGTTTTTGAGCACCTGACAAA
ATTTAGTGTTTACCTTGCGTGCCATTTTGTGTCTATCTTCAATTAAGCAATTGGAGGTTTGCCAGTTATCTC
ACTTCCCTTTTAAATCAATGTTGTTTAAATGCACATACTGAATTTCTGTAAAGAGGATTATCTTAGTTTATACT
TTGTATTTTATAATGTTCTTGTATAGCAGCTCGGTACTGAAGGCGGTGTTTAACTTGGCAAGCTCTGAGACTTCA
AATGGGAACAAAATAGTAAGTAGCTAAGTAAACCACATCTTTGCAACCAAAATAAAGATGAGTTAAAGGTATCTG
GTTAGGCTATTTTATGAGGACTATGCTCTGGTGGGACCACAGGTACCTGATACTTAGTGCTGTGCTGCCTGAA
ACCTCAGCATGGAGACATCACCACATGCACTGTGGCCATTGAGCATCTTTCTGGAGCACCAGTTCACTCCAGGTT
TTTATTTTAGGGTGTCTCGATTTTACCTACTTTGTGCACTGGTAGAAGTTGCTTTGCATATCAGAAAACTCC
ATTTTTTTCCACAAAAGGGATTACAGAAAATCTTTGTGAGTGAGTGATTGGAAGTTAGAGACTCTGTTGCCA
GAATCAGACTGCCCTAGAACAGAAATGGACAATGCAGGGAGGAGAAATCACACAAACAGCACCTGTTCTGAGGCT
GTGCCAGCCCACCAGGCTGCTCAAATGTGGTCTTTACTTCAAGTGCACAGAGGCACATGAGGTTTCTGGTGATA
AACCAGCGTCTTACCGCTGTTTTAAAGTCCCATCCCCATGGCTTTCACAATCAGTTCCGTTTTTTTTGCTGTACT
TGATAAAATGTTTATTCTCATAACAGGTCAAGTACATTTACTTCTATTACAGTGAGTACCCAATAACAACAAAAG
CGCTTACAAATTTGGGGGGCGTGATTTTGTACCTTTATTTGAAGTGTAATCATTTTAAATTATTATTATTTTAA
CTGGGGCAGTTATCAGTGGTTTTAAACAGGAATTTAGTGGCTTCAATTTGTTTAAAGAAACATATTAAGTTTGAAG
GAAAAATTTCCCATGAAATATTTGGAACGTAAGAGTAGTATTGATTAGAGAAAATTAATAAGAAACATAGTATG
GTAGCCAAATTTTTTAAAAATCTTGAATTTTCTGTAGGTGAGTTTGAAGTCTGTGAAAAGTGAAGGTTGC
CCTGTGGAGATTAAATTTAGAGTTGTTTTTCACTGACAGCATGGTGAATCCATTTGAGTCAAAGTGAAGAATT
TCCTCATCAAGTGACTATACATTTGTTTTTGTGTGCTCAAAGAAATTAATACTCAAACACAGACTGATATTAACCAGC
CAGGTAAATTTGAACGACAATGTGGCATTAGGTATTTGGCTGTTTATTGGTCTGTTAAATACTATGGTTTTGCAATA
TGATTGATGGTAAAGAGTGATGTATTTGATACTAGAGTAGCTTGTTTTTTTTAGTAGGTGTGGGACCATCTCT
TTTACAAGTGCAACTCAGTCTAGGACAGCCATGGATGCAGTGTCTGGAGTTGGACCCTCTGAGCCCCGCTGGCTGC
CCCAGTAGCATCTGCATTGGTGACCAAGGACACTGCACCTTGAAGAGGTCGCCACTGGGTTATTTAGTGTCTTCA
CTGCTTTTGTAAAAATTTGTAATTTTGTACACAAAAAGTTGTGTTTTTGAATATCAATTGTTTAGACACACCT
ACAAATGATAAATAAGTGCCTTTAAAGGCCCTCTTTCCATGAAATACATCTGTGGTTTAGCAAGGAAAGTACAAA
ATAGTTTATGTAGTTGGTATAATTTTTATTTGTGTCTTCATGTAGAAAAATGAATGTCATAATAAATAAATAA
CTTACGTAAAG

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FIGURE 2109

MDNAGRRRIHTNSTCSEACASPPGLLKCGLYFKCTEAHEVSGDKPASRYRCFKVPSWLSQSVPFLLYLIKCLFSY
RSSTFTSIHSEYPITTKALTNLGGVILVPLFEV

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FIGURE 2110

GTGACTGCTTAGAAAACTGCACAGCATCTGATGAAATTAGCGAATAAGAACATCAACCATGTCTTACACTCCAGG
AGTTGGTGGTGACCCCGCCAGTTGGCCAGAGGATCTCTTCTAACATCCAGAAGATCACACAGTGTTCTGTGGA
AATACAAAGAACTCTGAATCAACTTGGAACACCTCAAGATTACCTGAATTGAGGCAACAGTTGCAACAGAAGCA
GCAGTATACTAACCAGCTTGCCAAAGAAACAGATAAGTACATTAAAGAGTTTGGATCTCTGCCCACCACCCCCAG
TGAACAGCGTCAAAGGAAAATACAGAAGGATCGCTTAGTGGCAGAGTTTACAACATCACTGACAACTTCCAGAA
GGTCCAGAGGCAGGCTGCTGAGCGAGAGAAAGAGTTTGTGCTCGAGTAAGAGCCAGTTCCAGAGTGTCTGGCAG
TTTTCTGAGGACAGCTCAAAAGAAAGGAATCTTGTATCCTGGGAAAGCCAACTCAACCTCAAGTGCAGGTGCA
GGATGAAGAAATTACAGAGGATGACCTCCGTCTTATTCATGAGAGAGAATCTTCTATCAGGCAACTTGAAGCTGA
TATTATGGATATTAATGAAATATTTAAAGATTTGGGAATGATGATTTCATGAACAAGGAGATGTAATAGATAGCAT
AGAAGCCAATGTGGAAAATGCAGAGGTGCACGTTTCAAGCAAGCAATCAGCAGCTGTCAAGGGCAGCAGATTATCA
GCGCAAATCCAGAAAAACCTGTGCATCATCATTCTTATCCTTGTTCATTGGAGTTGCGATTATCAGTCTCATCAT
ATGGGGATTGAACCACTGAAGTTATAAAGGAGCACACTGTCGCACTACATTGTCTAAATTATGTAGGAAGATTCC
TGTAATCATGTTTTTTTAAATTATTATTTTAAAGCTATTGTATAAAGGATGGTTCCCATACTTTGTTATTTTTATT
GGGGGGGTTGGGGTGGTTTCCTTTGGATTAAATCTGATATTTTCTAATACTGAAAGATTTTCTAAATGTCACTGCT
GACATAACTCCCTTGGTCTTCAATTTAATAGTTGTTAAGTTTTTGGCCACATTGCATATGCCTTTCATTTATAAT
TTATTTACCTTGCTTGACTTAGTTTTGGGAATTCGTAAATTTAAAGGTGTGTGATTCTGTTTGCATCTCCCTGT
CACTGTGACACACCTAGATGTGTGTTACTTCAATTTAAATTTCTCAAATTTAATTTTGATTGCTTCAGCAGGGAA
AATATTCTCAATAATGTAAAATAATTAAGGTCTATACATGGGTTGTATTTTTCTGGTTCACAACAGCACAAAGTG
TCTTTCATTTTTTTGTTGGTTTTCTTTTAAAGATCTTTTTTACCCTGAAGTCGGTGAATACTTTTCTAGTTTATTT
GATACTCTTTCTGTGTATATATTAAGCTTTTGCTGTAGATTGCCTAGTAAAATTACTAAGGATAGGTTGTTTTTA
CATATGGTCTATTTAAGTCTGATGTTTACGGGGGAAAGTGTAGTTACTAAAAATGTTTAACATAATTTGGAAGAA
GAGTATGAACA

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FIGURE 2111

CTTTCCCTGCCGCCGCCGAGTCGCGCGGAGGCGGAGGCTTGGGTGCGTTCAAGATTCAGCTTCACCCGTAACCCA
CCGCCATGGCCCGAGGAAGGCATTGCTGCTGGAGGTGTAATGGACGTTAATACTGCTTTACAAGAGGTTCTGAAGA
CTGCCCTCATCCACGATGGCCTAGCACGTGGAATTGCGGAAGCTGCCAAAGCCTTAGACAAGCGCCAAGCCCATC
TTTGTTGCTTGTCATCCAACGTGATGAGCCTATGTATGTCAAGTTGGTGGAGGCCCTTTGTGCTGAACACCAAA
TCAACCTAATTAAGGTTGATGACAACAAGAACTAGGAGAATGGGTAGGCCTTTGTAAAATTGACAGAGAGGGGA
AACCCCGTAAAGTGGTTGGTTGCAGTTGTGTAGTAGTTAAGGACTATGGCAAGGAGTCTCAGGCCAAGGATGTCA
TTGAAGAGTATTTCAAATGCAAGAAATTGAAAGAAATAAATCTTTGGCTCACAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAA

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FIGURE 2112

MAEEGIAAGGVMDVNTALQEVLTALIH DGLARGIREAAKALDKRQAHLCVLASNCDEPMYVKLVEALCAEHQIN
LIKVDDNKKLGEWVGLCKIDREGKPRKVVGCSVVVKDYGKESQAKDVIEEYFKCKK

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FIGURE 2113

GGCCGCCTCGCACCCGGAACAACAAAGCAAGGAAGACGGAGTCCGAGCCTCGGGGGCTCCTAGCAACGGGCGGGG
GCGGGAGTTCCATGGAGACTGGGGAGCGCGCCCGTCTCATCCTCATCCTTGTCCTCCAGCTTCTCCTTCGCATCC
GACGCAACCGGCAGCAGCGCTGCCGCCGCGTCCTCAGCCACCGCTCCCTCTTCCCACGGATGTGATCTTCGTGGT
GGAAAGCTAAATTTTAAACCACCCCAATGGATGCAGACAGTGATGTTGCATTGGACATTCTAATTACAAATGTA
GTCTGTGTTTTTAGAACAAAGATGTCATTTAAACTTAAGGAAGATTGCTTTGGAAGGAGCAAATGTAATTTATAAA
CGTGATGTTGGAGTAATATTAATGAAGCTTAGAAAACCTAGAATTACAGCTACAATTTGGTCCTCAGGAAAAATT
ATTTGCACTGGAGCAACAAGTGAAGAAGAAGCTAAATTTGGTGCCAGACGCTTAGCCCGTAGTCTGCAGAACTA
GGTTTTCAGGTAATATTTACAGATTTTAAAGTTGTTAACGTTCTGGCAGTGTGTAACATGCCATTTGAAATCCGT
TTGCCAGAATTCACAAAGAACAATAGACCTCATGCCAGTTACGAACCTGAACTTCATCCTGCTGTGTGCTATCGG
ATAAAATCTCTAAGAGCTACATTACAGATTTTTTCAACAGGAAGTATCACAGTAACAGGGCCCAATGTAAAGGT
GTTGCTACTGCTGTGGAACAGATTTACCCATTTGTGTTTGAAAGCAGGAAAGAAATTTTATAATTCACCACTTAA
TTGGTTAGAACTCTAACTGAGCACCTTTTAAACCTGCTGCACATTGGACTCAAAGGAAAAGTGGACCAACAAT
AATTGAGGAAATAGACTCTTTTATTCATTACGGCTACAGTGTAAGCTCCAGTCCCTTTGGATTTTATTCCAAAC
CTTGCTGTAATATAAAAGGAAGTTTACAAGACATGATATTGCTGCTTTTACAAAAGGACATTCTATTTATTTTCG
CAGTAATTCTCATGTCCCCATAAGCAGAGCTGTCACAGTGTGCACTACCTTAGATTGTTTTATTGTCGTCATTGT
TATTTTTTTCCATTTTGAGCTAATGTGTTTTATTTGTGAATAGTCTTTTACATTTTGTATGCTGAATATGGGCA
CCAAAGAACCTGTAAAAGTTATCTTTTCAATTGAATGTGCACAAATAAAAGTTTGA

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FIGURE 2114

GCCGGGGAGGGACGCAGGCAGGCGGGCGGGCAGCGGGAGGCGGCAGCCCCGGTGCGGTCCCCGCGGCTCTCGGCGGA
GCCCCGCGCCCCGCGGCCATGGCCCCGAAGACCCCGGCACAGCATATATAGCAGTGACGAGGATGATGAGGACTT
TGAGATGTGTGACCATGACTATGATGGGCTGCTTCCCAAGTCTGGAAAGCGTCACTTGGGGAAAAACAAGGTGGAC
CCGGGAAGAGGATGAAAACTGAAGAAGCTGGTGGAAACAGAAATGGAACAGATGACTGGAAAGTTATTGCCAATTA
TCTCCCGAATCGAACAGATGTGCAGTGCCAGCACCGATGGCAGAAAGTACTAAACCTGAGCTCATCAAGGGTCC
TTGGACCAAAGAAGAAGATCAGAGAGTGATAGAGCTTGTACAGAAATACGGTCCGAAACGTTGGTCTGTTATTGC
CAAGCACTTAAAGGGGAGAATTGGAAAACAATGTAGGGAGAGGTGGCATAACCACTTGAATCCAGAAGTTAAGAA
AACCTCCTGGACAGAAGAGGAAGACAGAATTATTTACCAGGCACACAAGAGACTGGGGAACAGATGGGCAGAAAT
CGCAAAGCTACTGCCTGGACGAAC TGATAATGCTATCAAGAACCACTGGAATTCTACAATGCGTCGGAAGGTGCA
ACAGGAAGGTTATCTGCAGGAGTCTTCAAAAGCCAGCCAGCCAGCAGTGGCCACAAGCTTCCAGAAGAACAGTCA
TTTGATGGGTTTTGCTCAGGCTCCGCCTACAGCTCAACTCCCTGCCACTGGCCAGCCCACTGTTAACAACGACTA
TTCTATTACCACATTTCTGAAGCACAAAATGTCTCCAGTCATGTTCCATACCCTGTAGCGTTACATGTAAATAT
AGTCAATGTCCCTCAGCCAGCTGCCGACGCCATTTCAGAGACACTATAATGATGAAGACCTTGAGAAGGAAAAGCG
AATAAAGGAATTAGAATTGCTCCTAATGTCAACCGAGAATGAGCTAAAAGGACAGCAGGTGCTACCAACACAGAA
CCACACATGCAGCTACCCCGGGTGGCACAGCACCACCATTTGCCGACCACACCAGACCTCATGGAGACAGTGCACC
TGTTTCCTGTTTGGGAGAACACCACTCCACTCCATCTCTGCCAGCGGATCCTGGCTCCCTACCTGAAGAAAGCGC
CTCGCCAGCAAGGTGCATGATCGTCCACCAGGGCACCATTCTGGATAATGTTAAGAACCTCTTAGAATTTGCAGA
AACACTCCAATTTATAGATTCTTTCTTAAACACTTCCAGTAACCATGAAAACCTCAGACTTGGAAATGCCTTCTTT
AACTTCCACCCCCCTCATTGGTCAAAATTGACTGTTACAACACCATTTTCATAGAGACCAGACTGTGAAAACCTCA
AAAGGAAAATACTGTTTTTAGAACCCAGCTATCAAAAGGTCAATCTTAGAAAGCTCTCCAAGAACTCCTACACC
ATTCAAACATGCACCTGCAGCTCAAGAAATTAAATACGGTCCCCCTGAAGATGCTACCTCAGACACCCCTCTCATCT
AGTAGAAGATCTGCAGGATGTGATCAAAACAGGAATCTGATGAATCTGGAATTGTTGCTGAGTTTCAAGAAAATGG
ACCACCCTTACTGAAGAAAATCAAAACAAGAGGTGGAATCTCCAACGTATAATCAGGAAACTTCTTCTGCTCACA
CCACTGGGAAGGGGACAGTCTGAATACCCAAGTGTTCACGACAGCTCGCTGTGGCAGATGCACCGAATATTCT
TACAAGCTCCGTTTTTAATGGCACAGCATCAGAAGATGAAGACAATGTTCTCAAAGCATTTCAGATACCTAATAAA
CAGGTCCCTGGCGAGCCCCCTTGACGCTTGTAGCAGTACCTGGGAACCTGCATCCTGTGGAAAGATGGAGGAGCA
GATGACATCTTCCAGTCAAGCTCGTAAATACGTGAATGCATTCTCAGCCCGGACGCTGGTCATGTGAGACATTTTC
CAGAAAAGCATTATGGTTTTTCAGAACACTTCAAGTTGACTTGGGATATATCATTCCTCAACATGAAACTTTTCAT
GAATGGGAGAAGAACCTATTTTTGTTGTGGTACAACAGTTGAGAGCAGCACCAAGTGCATTTAGTTGAATGAAGT
CTTCTTGGATTTACCCAACTAAAAGGATTTTTTAAAAATAAATAACAGTCTTACCTAAATTATTAGGTAATGAAT
TGTAGCCAGTTGTTAATATCTTAATGCAGATTTTTTTAAAAAAAACATAAAATGATTTATCTGTATTTTAAAGGA
TCCAACAGATCAGTATTTTTTCTGTGATGGGTTTTTTGAAATTTGACACATTAAAAGGTACTCCAGTATTTTAC
TTTTCTCGATCACTAAACATATGCATATATTTTTTAAAAATCAGTAAAAGCATTACTCTAAGTGTAGACTTAATAC
CATGTGACATTTAATCCAGATTGTAAATGCTCATTTATGGTTAATGACATTGAAGGTACATTTATTGTACCAAAC
CATTTTATGAGTTTTCTGTTAGCTTGCTTTAAAAATTATTACTGTAAGAAATAGTTTTATAAAAAATTATTTTT
TATTCAGTAATTTAATTTTGTAAATGCCAAATGAAAAACGTTTTTTGCTGCTATGGTCTTAGCCTGTAGACATGC
TGCTAGTATCAGAGGGGCAGTAGAGCTTGGACAGAAAGAAAAGAACTTGGTGTAGGTAATTGACTATGCACTA
GTATTTTCAGACTTTTTAATTTTATATATATATACATTTTTTTTCTTCTGCAATACATTTGAAAACCTGTTTGGG
AGACTCTGCATTTTTTATTGTGGTTTTTTTGTATTGTTGGTTTTATACAAGCATGCGTTGCACTTCTTTTTTGGG
AGATGTGTGTTGTTGATGTTCTATGTTTTGTTTTGAGTGTAGCCTGACTGTTTTATAATTTGGGAGTTCTGCATT
TGATCCGCATCCCTGTGGTTTCTAAGTGTATGGTCTCAGAACTGTTGCATGGATCCTGTGTTTGCAACTGGGGA
GACAGAACTGTGGTTGATAGCCAGTCACTGCCTTAAGAACATTTGATGCAAGATGGCCAGCACTGAACTTTTGA
GATATGACGGTGTACTTACTGCCTTGTAGCAAAATAAAGATGTGCCCTTATTTT

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FIGURE 2115

MARRPRHSIYSSDEDDFEMCDHDYDGLLPKSGKRHLGKTRWTREDEKLKKLVEQNGTDDWKVIANYLPNRTD
VQCQHRWQKVLNPELIKGPWTKEEDQRVIELVQKYGPKRWSVIAKHLKGRIGKQCRERWHNHLNPEVKKTSWTEE
EDRIIYQAHKRLGNRWAEIAKLLPGRTDNAIKNHWNSTMRRKVEQEGYLOESSKASQPAVATSFQKNSHLMGFAQ
APPTAQLPATGQPTVNNDYSYYHISEAQNVSSHVPYPVALHVNIVNVPQAAAAIQRHYNDEDPEKEKRIKELEL
LLMSTENELKGQQLPTQNHCSYPGWHSTTIADHTRPHGDSAPVSCLEHHSTPSLPADPGSLPEESASPARCM
IVHQGTILDNVKNLLEFAETLQFIDSFLNTSSNHENSLEMPSLTSTPLIGHKLTVTTPFHRDQTVKTQKENTVF
RTPAIKRSILESSPRTPTPFKHALAAQEIKYGPLKMLPQTPSHLVEDLQDVIKQESDESGIVAEFQENGPPLLKK
IKQEVESPTDKSGNFFCSHHWEGDSLNTQLFTQTSPVADAPNILTSSVLMAPASEDEDNVLKAF TVPKNRSLASP
LQCSSTWEPASCGKMEEQMTSSSQARKYVNAFSARTLVM

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FIGURE 2116

CTCCCTGTCGCCGCGGAGGGGCGGGGGCAGGACGCGCAACTCCGGCCGGAGCTGTCCGGGGTCGTGAGCCGGCCC
CGCCTTGGTGGCGGGCGCCCCCTCGCGGTCCAGAGGCAGACGCATCGGGTGGGCTCGGGTCTCCAGCCCGGCCGGG
AGGAGGGACCGGGTCTGCGGAGCGGGGACTCGGGGCCTCGGCGGGGCGCGCACACGCAGGCGGGCGGCCCGGGG
TGCGGGGCCTCTGCGCGGCTGACCAGGCTCCCAGAGCGTCAGCGCCGCCCATGGCCGAGCCGCTCCAGCCAGACC
CCGGGGCGGCCGAGGACGCGGCGGCCCAAGCTGTGGAGACGCCGGGCTGGAAGGCCCGGAGGACGCCGGCCCCC
AGCCCGGAAGTTATGAGATCCGACACTATGGACCAGCCAAGTGGGTGAGCACGTCCGTGGAGTCTATGGACTGGG
ATTGAGCCATCCAGACGGGCTTTACGAACTGAACAGCTACATTCAAGGCAAAAACGAGAAAGAGATGAAAATAA
AGATGACAGCTCCAGTGACAAGCTACGTGGAGCCTGGTTTCAGGTCTTTTAGTGAGTCTACCATTACCATTTCCT
TGTATATTCCCTCTGAACAGCAATTTGATCCACCCAGGCCTTTAGAGTCAGATGTCTTCATTGAAGATAGAGCCG
AAATGACTGTGTTTGTACGGTCTTTTCGATGGATTTTCTAGTGCCCAAAGAATCAAGAACAACCTTTTGACATTAG
CAAGCATTTTAAGGGAAGATGGAAAAGTTTTTCGATGAGAAGGTTTACTACACTGCAGGCTACAACAGTCTCTGTCA
AATTGCTTAATAGAAATAATGAAGTGTGGTTGATTCAAAAAAATGAACCCACCAAAGAAAACGAATTGAGAAAAAT
GAAAGGAAGTTCTGCTGTCAGAGGCAAAACATCTGTTTATCATAGACATCAACATGACCTATAAGTAAAGTGCCT
GTCTAGTGTCTTCTATTGAGAGTACTACTATTAATTAAGCTTATTTCCAATGTGCCTTTTTAATGCTTGAAGTTT
TATCTACATACACAGGTAACAGAGGACAGTAGTCTGTAAACATATAAATCGGTCATAACTATCGTGGTCTTTATT
TCTGTGAGGATC

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FIGURE 2117

MAEPLQDPGAAEDAAAQAVETPGWKAPEDAGPQPGSYEIRHYGPAKWVSTSVESMDWDSAIQTGFTKLNSYIQG
KNEKEMKIKMTAPVTSYVEPGSGPFSESTITISLYIPSEQQFDPPRPLESDVFIEDRAEMTVFVRSFDGFSSAQK
NQEQLLTLASILREDGKVFDEKVYYTAGYNPVLNRRNNEVWLIQKNEPTKENE

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FIGURE 2118

AGAACCACCACAACAAATAACCAGCCTGGCAGTCAATTCTTCCTATGGACTGGTGGTTTTTGGCAATTGCAATGG
CATTGCTATGGTTGACTACCTCCAGAAAGCAGTGCTGCTCAACCTGGGCACTATTGAATTATATGGCTCTAATGA
TCCTTATCGGAGAGAACCCCGATCTCCTCGTAAATCTCGACAGCCTTCAGGAGCCGGTCTGTGTGATATTAGTGA
AGGGACTGTTGTTCCAGAGGATCGCTGCAAATCTCCAACCTCTGCAAAGATGTCAAGGAAGTTAAGCTTACCTAC
TGACCTAAAGCCTGATTTAGATGTAAAGGATAACTCCTTTAGCCGATCACGGAGTTCAAGTGTAAACAAGCATTGA
CAAAGAATCCCGAGAAGCGATCTCCGCTCTTCATTTCTGTGAAACGTTTACTCGAAAGACGGACTCGTCCCCTTC
CCCTTGCTATGGGTTGGAACAACGCTAGGAACAGTGCTTGTCTATTGCACTGAACCTTCCCCAGGGGGAGAGCA
AAGACTTCTTCAGCCAGTAATTGTGTCTCCAAGTGGTACTATATTGAGGTTAAAAGGTGCAATCTTGAGAATGGC
ATTTCTGGATACCACAGGCTGCTTAATACCACCTGCGTATGAACCCTGGAGAGAGCACAAATGTTCTGAAGAAAA
AGACGAAAAGGAGAAATTGAAAAAACGGCGGCTGTCTCAGTATCCCCCTCCTCTTCTCAGGAAATTAGTGAAAA
CCAGTATGCAGTGATATGTTCTGAAAAGCAAGCAAAAGTAATCTCACTGCCAACCCAGAAGTGTGCTTATAAGCA
AAATATTACAGAGACCTCGTTTGTGCTTCGTGGAGATATTGTAGCATTGAGTAACAGTATCTGCCTTGCCGTGTTT
CTGTGCCAATGGACATATAATGACTTTTAGTTTGCCAAGTTTAAAGACCTCTGTTGGATGTGTATTACTTGCCCT
TACCAATATGCGGATAGCCAGAAGCTTCTGCTTTACCAACAATGGACAAGCATTATACCTTGTTTACCTACAGA
AATCCAGAGACTTACTTATAGTCAAGAGACCTGTGAAAATCTTCAGGAAATGTTGGGTGAACCTCTTCACTCCTGT
AGAAACACCTGAAGCACCAACAGGGGATTCTTTAAAGGCTTATTTGGAGGTGGTGACAATCTCTTGACAGAGA
AGAACTATTTGGAGAATCGTCTCAGGAAAGGCTTCAAGGAGCCTTGACAGCATATTCCTGGCCCTGGTGGCAT
TGAAGGCGTAAAAGGGGAGCATCTGGAGTTGTTGGTGAATTAGCACGAGCCAGGCTGGCACTAGATGAAAGAGG
GCAGAACTTGGCGATCTGGAAGAAAGAACTGCGGCCATGTTATCAAGTGCAGAGTCATTTTCTAAACATGCTCA
TGAGATTATGTTGAAATACAAAGATAAGAAGTGGTACCAGTTCTGACAACCAGAATCCAATAAGTCCAACCTTCAG
CCAGAAGGAAAAAAGTTTTCCATTTTTATTACATTCTTTAGGAAAGTTAACGTTAAAGGGATGTTTCGTCACTGAA
TACTGTTCTTTCTAGCACAGTCATGCACTGTTTTACCTCAGTCATGTGGCTTTAACTGAGGAGTGTTACACGC
ACTCGAAATGGAGTATATGGTGTGTGCCAGTTATGAGTTGACCATTTGGGAATTAAACAGGTCACACGTGACAGA
TGAAGAAACCAAGGGGGCTGCTGAGGAGACCTGGTGAGGGACTAATCCTGGATCATTCTGTATTAACTTTTCA
TATGCCAAAAGGGTTTTGTGCCGTTTTATCTGCCATCAGTGTTTGACCTGTTTAGGGCAGAGGCAATAAGTCAGAA
GTCTTGAAGTTGAAATAGTTATATGTGTGTCATTGGACTGGATTATAAACAGCTGTCTTGGACTTTCCCTCTCTT
AACACTGACTGGTCATCAGTATCATTAGTGAAAAAGAAACAAATTGTTTGTTATCATCTCTTTAGACAGATAAGC
TGAATGGTGGGCTTTAAATAATAAAAAACATACATAGTTGACTTGTGTATGAGCTACTCTTGGATTCTTGTTAT
TATAGACTTGTATTTAGTTTCATATTTTGTCAAAAGCAAAACAAGAAGATACATCACTTTTTCATTGAAAAGAAAAG
TGTAAGCATGACTGAATTGCTCATCATTCTGGGAGTTTCCATGTAGTGGCTATGCAGTGTGAAAGTGAGAAAA
ACCTCCATTGTGGTGAGGAGAATACTTCAATGTCCCTTGCTCTTGTCTCATTAAATTCAGCTAAAGGTGGATTG
ACCAAAATAATGCTGGTTAAATTTGTAGAAATGTTGAAATTGGCTGTGTTTTAAATTTTGCTTGAATTTTTATAA
AATGTTTAAACCAATGTACCTTTGCATTCTTTAATTAAATTGCTT

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FIGURE 2119

TTTTTCGTCTGGGCTGCCAACATGCCATCCAGACTGAGGAAGACCCGGAACTTAGGGGCCACGTGAGCCACCGC
CACGGCCGCATAGGCAAGCACCGGAAGCACCCCGGCGGCCGCGGTAATGCTGGTGGTCTGCATCACCACCGGATC
AACTTCGACAAATACCACCCAGGCTACTTTGGGAAAGTTGGTATGAAGCATTACCACTTAAAGAGGAACCAGAGC
TTCTGCCCAACTGTCAACCTTGACAAATTGTGGACTTTGGTCAGTGAACAGACACGGGTGAATGCTGCTAAAAAC
AAGACTGGGGCTGCTCCCATCATTGATGTGGTGCGATCTGGCTACTACAAAGTTCTGGGAAAGGGAAAGCTCCCC
AAGCAGGCTGTCACCGTGCAGGCCAAATTCTTCAGCAGAAGAGCTGAGGAGAAGATTAAGAGTGTTGGGGGGCC
TGTGTCCTGGTGGCTTGAAGCCGCATGGAGGGAGTTTCATTAAATGCTAACTACTTAAAAAAAAAAAAAGAAGAA
GAAGAAGAAGAAAA

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FIGURE 2120

MPSRLRKTRKLRGHVSHRHGRIGKHKHPGGRGNAGGLHHHRINFDKYHPGYFGKVG MKHYHLKRNQSF CPTVNL
DKLWTLVSEQTRVNAAKNKTGAAP IIDVVRSGYYKVLGKGKLPQAVTVQAKFFSRRAEEKIKSVGGACVLVA

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FIGURE 2121

ATGCGGTCCCGGGTTCTGTGGGGCGCTGCCCGGTGGCTCTGGCCCCGCCGGGCCGTTGGCCCAGCCCCGCCGGCCC
CTGAGCTCCGGTAGCCCGCCGCTGGAGGAGCTGTTACCCGGGGCGGGCCCTTGCGGACCTTCCTCGAGCGCCAG
GCGGGGTCTGAAGCCCATTGAAGGTCAGGAGGCCCGAGTTGCTGGCGGTGATCAAACCTGCTGAACGAGAAGGAG
CGGGAGCTGCGGGAGACTGAGCACCTTGCTGCACGGTAAGGGTCGGGCCCGGGGAGAGGCGTCAGAGCACATTCT
TGACTCTTCGTTTGACTTTTCCACTGCCACACTACCCGAGTTTGAACTCTTTACTCACTTGACGCCGTTTTTA
TTTTGGATCAGAGGTCAGGACATCATTACGTGCTGTGATCCCATCCTCTCCTGTGGGCTCTCTTGCTCCTTTG
CCACGGCGCTCTGCCGCCCTTTTACATGCTTATTAGTTGTGGACTCGGGCAAGAGCTCATTAGCTCAGCAAGGATA
AATAAGGCACTGTCCCTGTGATGGGCTCCACAGCGGTGTTTCTCAAAGTGTGGTGTGGAGACCCATTGTCAGTAG
TATCAGGGCAGTGCTTGTTAATAGCAGACTTAGGACTCAGAATCTCAGACCTATACGTGGGTAAAGGTACTAAAT
TGGGAAATTCAGTATGGCCTAAGTATAGAATAGGTGGGAGATGATGTCATAGAAACATGAAGCCAGAAAAATAGT
TAAGAACCTTGCAAGACAAAGAATTTGGATTTATTTTTTATAGACCATGGAAAGTTAGCAAATGTTTTTAAGCAG
AGAATTCACGTCTTTGTAAAGAAAAGTTAATGGTGGCATGCGCTGAGGATAAATTGGAGTATTCTCCAGAAACGC
TGGTGGCTGACAGGCCAGGGAGGAGGCAGTTGAAACAATCCAAAGAAGAAATGGTGATAGGCATAGTTCTGACTC
ACAAAACATTTTGAGAAACAAGTTAGGATTTAGTGGCTTATGCCCTGAGAAGGATGAGGGAGAGAGTTAGTTCTA
AGAAAAGTCTTAGGTTTCTGGCTTCAGCACGAGTGGTACTGTTAATTAAGATGAAAGTATAAAAGTTGGACCGAA
TTTTTTAAAAAGATGAGTTTTGCATTGAATGCCATATTAAGTTAAAAATACCTGTGAAAAGGAATTCCAATAAAG
ATATCTGTACTAGTCTAGGAGAAAAAATTACTGACATAGGAGAAAAATTGAGCCCAAATAATCATATGAGAGCTC
TCGAGATATACAGTACGTGGTAAATTAAACCTTAGAAGTAGATGAGAACACTCAGGGAAAATGTGTTAAGATAGA
AACAAGTCTAACAAGGCCAGAAATACACAGTATTTGAGGAGCAGGCAGAGAAGAAGGCTATAAAAGGTCAAGAAA
AAAAACAGCCAGAGCTTTGTGACCCTGAAGTAGATAAATAAATGAAGCTGTAGAAGCCAATAGAAAATTTCAAGAA
GTAAGAGATCCTTGGCCAGGCGTGGTGGCTCACGCCTCTAATTCCAGCACTTTGAGAGGCTCAGGTGGGCCGATC
ACTTGAGCCCAGGAGTTTCGAGACCAGCCTGGGTAAACATGGCAAAACCCTGTCTCTACAAACAATGCAAAATTAGC
TGGGCATGGTGGTGCGTGCCTGTGGTCCCAGCTACTTGAGAGGCTGAGGTGGGAGAATCGCTTGAACCCGGGAGG
TGGAGGTTGCAGTGAGCCAAGATGGTGCCACTGCATTCCAGCCTGGGTGACAGCGCAAGACCCCTGCCTC

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FIGURE 2122

ATGCGGTCCCGGGTTCTGTGGGGCGCTGCCCGGTGGCTCTGGCCCCGCCGGGCCGTTGGCCCAGCCCGCCGGCCC
CTGAGCTCCGGTAGCCCGCCGCTGGAGGAGCTGTTACCCGGGGCGGGCCCTTGCGGACCTTCCTCGAGCGCCAG
GCGGGGTCTGAAGCCCATTGAAGGTCAGGAGGCCCGAGTTGCTGGCGGTGATCAAACCTGCTGAACGAGAAGGAG
CGGGAGCTGCGGGAGACTGAGCACTTGCTGCACGATGAGAATGAAGATTTAAGGAACTTGCAGAGAATGAAATC
ACTTTGTGTCAAAAAGAAATAACTCAGCTGAAGCATCAGATTATCTTACTTTTGGTTCCCTCAGAAGAAACAGAT
GAAATGATTGATCCTGGAGTAACTGCAGGAGTTGGAGGTCAGGAGGCAATGTTGTTTACATCAGAGATATTT
GATATGTATCAGCAATATGCTGCATTTAAAAGATGGCATTTTGAAACCCTGGAATATTTTCCAAGTGAAGTAGGT
GGCCTTAGACATGCATCTGCCAGCATTGGGGGTTTCAAGCCCTATAGGCACATGAAATTTGAAGGAGGTGTTTAC
AGAGTACAAAGAGTGCCAAAGACAGAAAAGCAAGGCCGCTCCATACTAGCACCATGACTGTAGCAATATTACCC
CAGCCTACTGAGATTAATCTGGTGATTAATCCGAAAGATTTGAGAATTGACACTAAGCGAGCCAGTGGAGCTGGG
GGGCAGCATGTAATAACACGGACAGTGCTGTCCGGATAGTTCATCTTCCAACAGGTGTTGTTTCTGAATGTCAA
CAAGAGAGATCTCAGCTGAAAAATAAAGAGCTGGCTATGACAAAGTTACGTGCAAACTGTACAGCATGCATCTA
GAAGAAGAAATAAATAAAGACAGAATGCTAGAAAAATTCAGATTGGAAGTAAAGGAAGATCAGAGAAAAATAAGA
ACATATAATTTTCCACAGAACCGGGTCACAGATCACAGAATAACAAGACGCTGCATGATCTTGAAACTTTTATG
CAAGGAGATTATCTACTGGATGAACCTGTACAGTCATTGAAGGAATACGCCGATTATGAATCTTTAGTAGAAATT
ATTTCCCAAAAAGTTTAA

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FIGURE 2123A

CAAAAATCAGTCTGATCTCGGGAAACCTGGAGAAATTTATTTTCTGTACTCTAATGTTCTTTTCATTTTGGTGACC
ATCAAGGTGCTGGGAGAGGAATTAGATGGCTGTAATTCAAAGTTAATGGAATTAGATGCAGCAGTACAGAAATTC
TTGGAACAGAATGGCCAACTGGGTAAGCCACTGGCCAAGAAGATAGGAAAACCTGACTGAACTTCACCAGCAGACC
ATTAGACAAGCTGAGAATCGGCTCTCCAAGCTCAATCAGGCAGCATCACATTTAGAAGAATACAATGAAATGCTT
GAATTAATTTTGAAGTGGATTGAAAAAGCTAAAGTCTTGGCTCATGGAACCTATTGCATGGAATTCTGCAAGCCAG
CTTCGGGAACAATATATTTTGCATCAGACCCTGCTAGAAGAATCCAAAGAAATTGACAGTGAGCTGGAAGCAATG
ACTGAGAAATTACAGTACCTACTAGCGTGTACTGTACAGAAAAATGTCTCAGCAAGTGGCAGAACTGGGACGG
GAGACTGAGGAGTTGCGACAGATGATCAAAATTCGTTTGCAGAACCTCCAAGATGCAGCTAAGGATATGAAAAA
TTTGAAGCAGAGTTGAAAAAGTTACAAGCTGCCTTGGAGCAAGCCCAGGCAACACTGACTTCTCCAGAAGTTGGA
CGTCTCAGTCTCAAGGAGCAGCTCTCTCATCGGCAGCATTTGTTGTCTGAGATGGAGTCACTGAAGCCGAAGGTG
CAAGCAGTGACGCTCTGCCAGAGTGCCCTCCGGATCCCCGAGGATGTGGTTGCCAGCTTACCTCTCTGTATGCT
GCTCTGCGGCTGCAGGAAGAGGCCAGCCGGCTGCAGCACACCGCCATCCAGCAGTGTAACATCATGCAGGAAGCT
GTGGTACAATATGAACAATATGAGCAAGAAATGAAACATCTCCAGCAACTGATAGAAGGAGCTCACAGAGAGATT
GAGGATAAACCTGTTGCCACCAGTAACATACAGGAGCTGCAGGCTCAGATTTCTCGGCATGAGGAGCTGGCGCAG
AAAATTAAGGGCTACCAGGAGCAGATCGCTTCTTTGAATTCGAAGTGCAAGATGCTGACGATGAAAGCCAAGCAC
GCCACCATGCTGCTGACGGTGACCGAGGTGCGAGGGGCTGGCGGAAGGGACAGAGGACCTGGATGGGGAGCTCCTC
CCCACGCCTTCGGCCACCCCTCTGTGGTCATGATGACTGCAGGTGCTGTACACTTTGCTGTACCCGGTCACT
GAGGAGTCTGGGGAGGAGGGAACCAACAGTGAGATTTCTCTCCACCTGCCTGTCTGCTCCCCCTTCACTGTGGCT
AATACAGATGCTTCTGTTAACCAGGACATTGCATATTACCAAGCCTTGTCTGCTGAGAGGTTGCAGACAGATGCT
GCAAAAATTCACCCCAGCACATCCGCATCCCAGGAGTTCTATGAACCGGATTGGAGCCATCCGCTACTGCCAAA
CTGGGTGATTGTCAGCGTTCTTGGGAAACCTTAAAGAAATGTGATCAGTGAGAAGCAGCGCACACTCTATGAAGCT
TTGGAACGCCAGCAGAAGTACCAGGACTCCCTCCAGTCCATCTCTACGAAGATGGAGGCCATTGAGCTGAAACTC
AGTGAGAGCCCAGAGCCTGGCAGGAGTCCAGAAAGCCAGATGGCTGAACATCAGGCATTGATGGATGAGATTCTC
ATGCTCCAGGATGAAATCAATGAGCTCCAGTCTCTCTCGCAGAGGAGCTGGTATCCGAGTCTTGTGAGGCCGAC
CCTGCGGAGCAGCTGGCCTTGCACTCCAGCTCACTGTCTTAGCCGAGCGAATGTCCACCATCAGGATGAAAGCC
TCGGGGAAACGGCAGCTTTTGGAGGAGAAGTTGAATGATCAGCTGGAGGAACAAAGGCAGGAACAGGCCCTGCAG
AGGTATCGCTGTGAAGCCGATGAGCTGGACAGCTGGCTCTTGAGTACCAAGGCCACTCTGGACACTGCGCTGAGT
CCACCCAAGGAGCCCATGGACATGGAGGCCAGCTTATGGACTGCCAGAATATGCTGGTGGAAATAGAGCAGAAG
GTGGTGGCTTTATCAGAACTGTCACTCCACAATGAGAACCCTGTCTGGAGGGCAAAGCTCACACCAAGGACGAG
GCCGAGCAGCTGGCTGGAAAGCTGAGAAGGCTCAAGGGGAGCCTGTCTGGAGCTGCAGAGAGCCCTGCATGATAAG
CAGCTCAACATGCAGGGAACAGCACAGGAGAAGGAGGAGCGATGTTGACCTAACAGCCACGCAGAGCCCCGGC
GTCCAGGAATGGCTGGCCCAAGCTCGCACCATGACCCAGCAGCGGCAGAGCAGTCTCCAGCAACAAAAAGAG
TTAGAACAGGAATTAGCCGAGCAGAAGAGTCTCCTTCGCTCAGTAGCCAGTCTGGAGAGGAGATTCTAATTCAA
CATTTCGGCGGCAGAGACCTCTGGTGATGCTGGCGAAAAACCTGATGTGTTATCCCAGGAGTTGGGGATGGAAGGG
GAGAAATCATCCGCTGAAGACCAGATGAGAATGAAATGGGAAAGCCTACATCAAGAATTTAGTACCAAGCAGAAA
CTACTACAGAATGTTCTGGAACAGGAACAAGAGCAAGTGCTTTATAGCAGGCCAAATCGACTCTTGTCTGGTGTG
CCACTGTACAAAGGGGACGTGCCAACCCAAGATAAATCTGCAGTTACATCTTTGCTGGATGGACTGAACCAAGCC
TTCGAGGAGGTTTTCATCCCAGAGTGGAGGGGCAAAGAGGCAGAGTATACACTTGGAGCAGAAGTTGTATGATGGA
GTCTCAGCCACCTCTACTTGGTTGGATGACGTTGAAGAAGCTTTATTTGTTGCCACAGCACTTTTACCAGAAGAA
ACAGAGACTTGTCTCTTCAACCAAGAGATTCTTGCCAAAGACATTAAGGAAATGTCTGAAGAAATGGATAAGAAC
AAAACTTGTTTTCCCAAGCTTTTCCAGAGAATGGTGATAATCGAGATGTTATTGAAGATACTTTGGGTGTCTT
TTGGGCAGGTTATCCTTGCTAGACTCAGTAGTGAATCAACGATGTCATCAGATGAAAGAAAGACTTCAGCAAATA
CTAAATTTCCAGAATGATCTGAAAGTGCTGTTTACATCACTGGCTGACAACAAATACATCATTCTGCAAAAACCTG
GCAATGTGTTTGAACAGCCCGTAGCAGAACAAATAGAGGCAATACAACAGGCTGAAGATGGACTCAAAGAAATTT
GATGCAGGAATCATTGAATTAAGAGGCGTGGTGACAAGCTACAGGTCGAGCAGCCGTCATGCAAGAACTCTCC
AAGCTCCAGGACATGTATGATGAGCTGATGATGATCATTGGCTCCCGGAGGAGTGGTCTGAATCAGAACCTTACA
CTCAAGAGTCAGTATGAGAGGGCCCTACAAGATCTGGCTGACCTGCTAGAACTGGTCAGGAGAAGATGGCAGGA
GACCAGAAAATCATCGTGTCTTCCAAAGAGGAAATCCAGCAACTACTTGACAAACATAAGGAATACTTTCAGGGC

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FIGURE 2123B

CTGGAATCTCATATGATCTTGGACTGAAACACTCTTCAGAAAGATAATCAGCTTTGCAGTCCAAAAGGAAACCCAG
 TTCCATACAGAGCTGATGGCTCAGGCTTCTGCTGTACTGAAACGGGCTCACAAGAGGGGTGTGGAGCTGGAGTAC
 ATTCTAGAGACGTGGTCCCATCTGGATGAGGACCAGCAGGAGCTCAGCAGACAGCTGGAGGTGGTGGAAAGCAGC
 ATCCCAAGCGTGGGTCTGGTGGAGGAGAACGAGGACAGGCTTATTGACCGCATAACACTCTACCAGCATTAAAA
 TCTAGCCTTAATGAATACCAGCCCAAATTATATCAAGTATTAGATGATGGGAAACGACTTCTGATATCCATCAGC
 TGCTCAGATCTAGAAAGCCAATAAATCAACTTGGAGAGTGTGGCTAAGTAACACCAATAAAATGTCTAAGGAA
 CTTACAGACTGGAAACAATATTGAAACACTGGACCAGATATCAAAGTGAATCTGCAGATCTAATTCACTGGTTA
 CAATCTGCAAAAGACCGGCTAGAATTTTGGACTCAGCAATCTGTGACAGTCCCACAAGAGCTGGAAATGGTCCGT
 GATCATCTAAATGCTTTCTTGGAGTTTTCTAAAGAAGTGGATGCCCAATCTTCCCTGAAATCATCTGTTCTGAGT
 ACTGGAAATCAGCTCCTTCGACTAAAAAAGGTGGACACAGCCACGCTGCGCTCTGAGCTGTGCGCATTGATAGC
 CAGTGGACTGACCTGCTAACCAATATCCCAGCCGTCCAGGAGAAGCTCCACCAGCTCCAGATGGATAAACTGCC
 TCCCGCCATGCCATTTCTGAAGTCATGAGTTGGATTTCTCTAATGGAAAATGTTATTGAGAAGGATGAAGATAAT
 ATTAATAATTCATAGGTTACAAGGCAATTCATGAATACCTTCAGAAATATAAGGGTTTTAAGATAGACATTAAC
 TGTAACAGCTGACAGTGGATTTTGTGAACAGTCCGTGCTACAAATCAGCAGTCAGGATGTGGAAAGTAAGCGT
 AGTGATAAGACTGATTTTGTCTGAGCAACTTGGAGCAATGAATAAAAGTTGGCAAATCTGCAAGGTCTAGTAAC
 GAGAAGATCCAGCTGTTGGAAGGCTTATTGGAATCTTGGTCAGAAATGAAAATAATGTACAATGTCTGAAAACA
 TGGTTTTGAAACCCAGGAAAAGAGACTAAAACAACAGCATCGAATTGGAGATCAGGCTTCTGTTCAAAATGCACTG
 AAAGACTGTCTAGGATCTGGAAGATTTGATTAAAGCAAAAGAAAAAGAGTAGAGAAAATTGAGCAGAATGGACTT
 GCTTTGATTTCAGAACAAAGAAAGAGACGTCTCTAGCATTGTCTGAGCAGCTGCGAGAGCTCGGCCAAACCTGG
 GCAAATTTAGATCAGATGGTTGGACAATTAAGATACTGTGAAATCAGTGCTTGACCAATGGAGTAGTCACAAA
 GTGGCCTTTGACAAGATAAACAGTTACCTCATGGAGCCAGATACTCTCTTCCCGATTCCGTCTGCTGACTGGC
 TCCTTAGAAGCTGTGCAAGTTAGGTTGACAATCTTCAGAATCTCCAAGATGATCTGGAACCAAGGAAAGGAGC
 TTACAGAAATTTGGCTCTATCACCACCAATTATTAAAGAGTGTCAACCCACCCGTGACAGAACTCTTACCAAT
 ACACTGAAAGAAGTCAACATGAGATGGAATAACTTGCTGGAAGAGATTGCTGAGCAGCTACAGTCCAGCAAGGCC
 CTACTTCAGCTTTGGCAAAGATACAAGGACTACTCCAAACAGTGTGCTTCGACAGTTCAGCAGCAGGAGGATCGA
 ACCAATGAGCTGTTGAAGGCAGCCACAAACAAGGACATTGCCGATGATGAGGTTGCCACATGGATTCAAGATTGC
 AACGACCTCCTCAAAGGACTGGGCACAGTTAAAGATTCCCTCTTTTCTCCATGAGCTGGGAGAGCAACTGAAG
 CAACAAGTGGATGCTTCCGCAGCATCAGCTATTCAATCGGATCAACTCTCTTTGAGTCAACACTTGTGTGCCCTG
 GAGCAAGCTCTCTGCAAACAGCAGACTTTCATTACAGGCTGGAGTTCTTGATTATGAAACCTTTTGCCAAGAGTTTA
 GAAGCTTTGGAGGCTGGATAGTGAAGCTGAAGAAATACTACAAGGGCAGGACCCTAGCCACTCATCTGACCTC
 TCCACAATCCAGGAAAGGATGGAAGAACTTAAGGGACAGATGTTAAAAATTCAGCAGCATGGCTCCAGATTTAGAC
 CCTCTAAATGAGCTTGGATATAGGTTACCTTGAATGATAAGGAAATCAAAAAGATGCAGAATCTGAACCGCCAT
 TGGTCTCTGATCTCTCTCAGACTACAGAAAGATTGAGCAAGTTGCAGTCATTTTGTCTACAACATCAGACTTTC
 TTGGAAAAATGTGAAACATGGATGGAATTCCTAGTTCAGACAGAACAAAAGTTAGCAGTAGAGATTTTCAGGAAAT
 TATCAGCACCTTTTGGAACAGCAGAGAGCACACGAGTTGTTTCAAGCCGAGATGTTTCAGTCGTCAGCAGATTTTG
 CACTCAATCATTATTGATGGGCAACGTCTTCTAGAACAAGGTCAAGTTGATGACAGGGATGAATTCAACCTGAAA
 TTGACACTCCTCAGTAATCAATGGCAGGGAGTGATTGCGAGGGCCAGCAGAGGCGGGGGATCATTGACAGCCAG
 ATTCGCCAGTGGCAGCGCTATAGGGAGATGGCAGAAAAGCTTCGTAAATGGTTGGTTGAAGTGTCTACCTCCCC
 ATGAGTGGTCTCGGAAGTGTTCCTATACCACTGCAACAAGCAAGGACCCTCTTTGATGAAGTGCAGTTCAAAGAA
 AAAGTGTCTCTCGGCAACAAGGCAGCTACATCTGACTGTGGAGGCTGGCAAGCAACTCCTTCTCTCGGCGGAC
 AGTGGCGCTGAGGCGCCTTGCAGGCCGAATCGCTGAAATCCAAGAGAAATGGAAATCAGCCAGCATGCGGCTG
 GAAGAACAGAAGAAAAAACTAGCCTTCTGTTGAAAGACTGGGAAAAATGTGAGAAAGGAATAGCAGATTCCCTG
 GAGAACTACGAACCTTCAAAAAGAAGCTTTCGAGTCTCTCCCGATCACCATGAAGAGCTCCATGCAGAACAA
 ATGCGTTGCAAGGAATTAGAAAATGCAGTTGGGAGCTGGACAGATGACTTGACCCAGTTGAGCCTGCTGAAGGAC
 ACCCTCTCTGCCTATATCAGTGCTGATGATATCTCCATTCTTAATGAACGCGTAGAGCTTCTGCAAAGGCAGTGG
 GAAGAATATGCCACCAGCTCTCCTTAAGGCGGCAGCAATAGGTGAAAGATTGAATGAATGGGCAGTCTTCAGT
 GAAAAGAACAAGGAATCTGTGAGTGGTTGACTCAAATGGAAAGCAAAGTTTCTCAGAATGGAGACATTCTCATT
 GAAGAAATGATAGAGAAGCTCAAGAAGGATTATCAAGAGGAAATTGCTATTGCTCAAGAGAACAAAATACAGCTC

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FIGURE 2123C

CAACAAATGGGAGAACGACTTGCTAAAGCCAGCCATGAAAGCAAAGCATCTGAGATTGAATACAAGCTGGGAAAG
GTCAACGACCGGTGGCAGCATCTCCTGGACCTCATTGCAGCCAGGGTGAAGAAGCTGAAGGAGACCCTGGTAGCC
GTGCAGCAGCTTGATAAGAACATGAGCAGCCTGAGGACCTGGCTCGCTCACATCGAGTCAGAGCTGGCCAAGCCA
ATAGTCTACGATTCTGTAACTCGGAAGAAATACAGAGAAAGCTTAATGAGCAGCAGGAGCTTCAGAGAGACATA
GAGAAGCACAGTACAGGTGTTGCATCTGTCTCAACCTGTGTGAAGTCCTGCTGCACGACTGTGACGCCTGTGCC
ACTGATGCCGAGTGTGACTCTATACAGCAGGCTACGAGAAACCTGGACCGGCGGTGGAGAAACATTTGTGCTATG
TCCATGGAAAGGAGGCTGAAAATCGAAGAGACGTGGCGATTGTGGCAGAAATTTCTGGATGACTATTACGTTTT
GAAGATTGGCTGAAGTCTTCAGAAAGGACAGCTGCTTTTCCAGCTCTTCTGGGGTGATCTATACAGTTGCCAAG
GAAGAACTAAAGAAATTTGAGGCTTTCCAGCGACAGGTCCACGAGTGCCTGACGCAGCTGGAACCTGATCAACAAG
CAGTACCGCCCGCTGGCCAGGGAGAACCACACTGATTTCAGCATGTAGCCTCAAACAGATGGTTCACGAAGGCAAC
CAGAGATGGGACAACCTGCAAAAGCGTGTACCTCCATCTTGCGCAGACTCAAGCATTTTATTGGCCAGCGTGAG
GAGTTTGAGACTGCGCGGGACAGCATTCTGGTCTGGCTCACAGAGATGGATCTGCAGCTCAC TAATATTGAACAT
TTTTCTGAGTGTGATGTTCAAGCTAAAATAAAGCAACTCAAGGCCTTCCAGCAGGAAATTTCACTGAACCACAAT
AAGATTGAGCAGATAATTGCCAAGGAGAACAGCTGATAGAAAAGAGTGAGCCCTTGGATGCAGCGATCATCGAG
GAGGAAC TAGATGAGCTCCGACGGTACTGCCAGGAGGTCTTCGGGCGTGTGGAAAGATACCATAAGAAAC TGATC
CGCCTGCCTCTCCAGACGATGAGCACGACCTCTCAGACAGGGAGCTGGAGCTGGAAGACTCTGCAGCTCTGTGC
GACCTGCACTGGCACGACCGCTCTGCAGACAGCCTGCTTTCTCCACAGCCTTCCTCCAATCTCTCCCTCTCGCTC
GCTCAGCCCCCTCCGGAGCGAGCGGTGAGGACGAGACACCCCGGCTAGTGTGGACTCCATCCCCCTGGAGTGGGAT
CACGACTATGACCTCAGTCGGGACCTGGAGTCTGCAATGTCCAGAGCTCTGCCCTCTGAGGATGAAGAAGGTCAG
GATGACAAAGATTTCTACCTCCGGGGAGCTGTTGGCTTATCAGGGGACCACAGTGCCCTAGAGTCACAGATCCGA
CAACTGGGCAAAGCCCTGGATGATAGCCGTTTTCAGATACAGCAAACCGAAAATATCATTGCGAGCAAAACTCCC
ACGGGGCCCGGAGCTAGACACCAGCTACAAAGGCTACATGAACTGCTGGGCGAATGCAGTAGCAGTATAGACTCC
GTGAAGAGACTGGAGCACAACTGAAGGAGGAAGAGGAGAGCCTTCCTGGCTTTGTTAACCTGCATAGTACCGAA
ACCCAAACGGCTGGTGTGATTGACCGATGGGAGCTTCTCCAGGCCCAGGCATTGAGCAAGGAGTTGAGGATGAAG
CAGAACCTCCAGAAGTGGCAGCAGTTTAACTCAGACTTGAACAGCATCTGGGCCTGGCTGGGGGACACGGAGGAG
GAGTTGGAACAGCTCCAGCGTCTGGAACCTCAGCACTGACATCCAGACCATCGAGCTCCAGATCAAAAGCTCAAG
GAGCTCCAGAAAGCTGTGGACCACCGCAAAGCCATCATCTCTCCATCAATCTCTGCAGCCCTGAGTTCACCCAG
GCTGACAGCAAGGAGAGCCGGGACCTGCAGGATCGTTGTGCGAGATGAATGGGCGCTGGGACCGAGTGTGCTCT
CTGCTGGAGGAGTGGCGGGGCTGCTGCAGGATGCCCTGATGCGATGCCAGGGTTTCCATGAAATGAGCCATGGT
TTGCTTCTTATGCTGGAGAACATTGACAGAAGGAAAAATGAAATTGTCCCTATTGATTCTAACCTTGATGCAGAG
ATACTTCAGGACCATCAAAACAGCTTATGCAATAAAGCATGAGCTGTTGGAATCCCAACTCAGAGTAGCCTCT
TTGCAAGACATGTCTTGCCAACTACTGGTGAATGCTGAAGGAACAGACTGTTTAGAAGCCAAAGAAAAAGTCCAT
GTTATTGGAATCGGCTCAAACCTTCTCTTGAAGGAGGTGAGTCGTATATCAAGGAACTGGAGAAGTTATTAGAC
GTGTCAAGTAGTCAGCAGGATTTGTCTTCTGGTCTTCTGCTGATGAACTGGACACCTCAGGGTCTGTGAGTCCC
ACATCAGGAAGGAGCACCCCAAACAGACAGAAAACGCCACGAGGCAAGTGTAGTCTCTCACAGCCTGGACCTCT
GTCAGCAGTCCACATAGCAGGTCCACAAAAGGTGGCTCCGATTCTCCCTTTCTGAGCCAGGGCCAGGTGGTCC
GGCCGCGGCTTCTGTTCAGAGTCTCCGAGCAGCTCTTCCCTTCAGCTTCTCCTGCTCCTCCTCATCGGGCTT
GCCTGCCTTGTACCAATGTGAGGGAAGACTACAGCTGTGCCCTCTCCAACAACCTTGCCCGGTCAATCCACCCC
ATGCTCAGATACACGAATGGCCCTCCTCCACTCTGAACTAAGCAGATGCCATCTGCAGAAGTGCTGGTAGCATAA
GGAGGATCGGGTCATAAGCAATCCCAAACCTACCAACAAGAGGACCTTGATCTTGGCGAAAGCCCTCGGTGTGGCA
GCTTTAGCCCTCCTCCAGATCACATGTGTGCAAATTATGGCTTCAGAGGTGGAAGATAAAACAGTGACGGGGGAAC
AAACAGACAACAAGAAGTTTGGAAAGAAATCTGGTTTGAGACTCTGAACCTTAGCACTAAGGAGATTGAGTAAGG
ACCTCCAAAGTTCCCCGGAATCATGAATTCTGGGCCCTTGCCCCATTCTGTGCACAGCCAAGGACTTCAGTAGAC
CATCTGGGCAGCTTTCCCATGGTGTGCTCCAACCATCAGATAAATGACCCTCCCAAGCACCATGTGAGTGTGCT
ACAATCTACCAACCAACCAGTGTGAAGAGATTTTGAACCTTGTAACATACAATTTTTAAGAGCTTATATGGCA
GCTTCTTTTTTACCTTGTGTTTTCTTTGGGGCATGATGTTTTAACCTTTGCTTTAGAAGCACAAGCTGTAAATCTA
AAAGGCACTTTTTTTTTAGAGGTATAAAGAAAACTAGATGTAATAAATAAGATCATGGAAGGCTTTATGTGAAAA
AAGTTGAATGTTATAGT

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FIGURE 2124A

GCAGAGTCTGAGTCCCACTCCGCACCCACCCCTCTGTCTGGTACAGCTTACCAAACCAAAGTGCCCAAAGCCGTG
ACATCCCGGGCCGGCGGCTCGCAGGCCCGCCCTCCGCACGTACAGGCCGCCGGGTGCAGTGCCCCCTAGGGGCC
CCTGGGACGAGGAGGAAGCGCCAGGTCTTCCCGCCGCCGCCGCCGCCGCCGCCCTGCTCCCCTGGCACGCGC
CCCGCCGCCCTCGGCAGCCGCAGTCCGTGTCCCTGAGAACCAGCCGTCCCGCGCCATGGGCACGCGTCTGCCG
CTCGTCTGCGCCAGTCCGCCGCCGCCGCCAGCCCCCGGGCCCTCCCGCGCCGCTCCGTGTGCCCTGTGCGGCT
AGCAGCGGGCGGCGGAGGCGGCGGCGGTGGCCGGGAGGGCCCTGCTTGGACAGCGGGCGCGCAGGATGGCCAG
GCCCGGAGCAGCTGCAGCCCCGGCGGCCGAACGCCCGCGGCGCGGGACTCCATCGTCAGAGAAGTCATTGAGAA
TCAAAAGAAGTTCTAAGTTTATTGCAAGAAAAAACCTGCTTCAAGCCGGTTCTTGCAATTATCCAGGCAGGT
GACGACAACCTTGATGCAGGAAATCAACCAGAAATTTGGCTGAGGAGGCTGGTCTGAACATCACTCACATTTGCCTC
CCTCCAGATAGCAGTGAAGCCGAGATTATAGATGAAATCTTAAAGATCAATGAAGATACCAGAGTACATGGCCTT
GCCCTTCAGATCTCTGAGAACTTGTTTAGCAACAAGTCTCAATGCCTTGAAACCAGAAAAAGATGTGGATGGA
GTAACAGACATAAACCTGGGGAAGCTGGTGCAGGGGATGCCCATGAATGTTTGTTCACCTGTTGCCAAAGCT
GTAATTGAACCTTCTGAAAAATCAGTAGGTGTCAACCTAGATGGAAAGAAGATTTTGGTAGTGGGGGCCATGGG
TCTTTGGAAGCTGCTCTACAATGCCTGTTCCAGAGAAAAGGGTCCATGACAATGAGCATCCAGTGGAAGAACACGC
CAGCTTCAAAGCAAGCTTACGAGGCTGACATTGTGGTCTTAGGCTCACCTAAGCCAGAAGAGATTTCCCTTACT
TGGATACAACCAGGAACCTACTGTTCTCAACTGCTCCCATGACTTCTGTGAGGGAAGGTTGGGTGTGGCTCTCCA
AGAATACATTTTGGTGGACTCATTGAGGAAGATGATGTGATTCTCTTGTGTCAGCTCTGCGAATTCAGAACATG
GTCAGTAGTGGAAGGAGATGGCTTCGTGAACAGCAGCACAGGCGGTGGAGACTTCACTGCTTGAAACTTCAGCCT
CTCTCCCCTGTGCCAAGTGACATTGAGATTTCAAGAGGACAACTCCAAAAGCTGTGGATGTCTTGCCATGGAAGG
ATTGGATTGCTTGAGATGAAATTGAAATCTATGGCAAAGCAAAGCCAAAGTACGTTTGTCCGTGCTAGAAAGG
TTAAAGGATCAAGCAGATGGAAAATACGTCTTAGTTGCTGGGATCACACCCACCCCTCTTGAGAAGGGAAGAGC
ACAGTCACCATCGGGCTTGTGACGGCTCTGACCGCACACCTGAATGTCAACTCCTTGCCTGCTTGAGGCAGCCT
TCCCAAGGACCGACGTTTGGAGTGAAAGGAGGAGCCGCGGTGGTGATATGCCAGGTATCCCCATGGAGGAG
TTCAACCTTCACTTGACTGGAGACATCCACGCCATCACCGCTGCCAATAACTTGCTGGCTGCCGCCATCGACACG
AGGATTCTTCATGAAAACACGCAAACAGATAAGGCTCTGTATAATCGGCTGGTTCCCTTAGTGAATGGTGTGAGA
GAATTTTCAGAAATTCAGCTTGCTCGGCTAAAAAACTGGGAATAAATAAGACTGATCCGAGCACACTGACAGAA
GAGGAAGTGAGTAAATTTGCCGCTCTGACATCGACCCATCTACCATCACGTGGCAGAGAGTATTGGATACAAAT
GACCGATTTCTACGAAAAATAACCATCGGGCAGGAAACACAGAGAAGGGCCATTACCGGCAGGCGCAGTTTGAC
ATCGCAGTGCCAGCGAGATCATGGCGGTGCTGGCCCTGACGGACAGCCTCGCAGACATGAAGGCACGGCTGGGA
AGGATGGTGGTGGCCAGTGACAAAAGCGGGCAGCCTGTGACAGCAGATGATTGGGGGTGACAGGTGCTTTGACA
GTTTTGATGAAAGATGCAATAAAACCAACCTGATGCAGACCCTGGAAGGGACACCTGTGTTCTGTCATGCGGGC
CCTTTTGCTAACATTGCTCAGGCCAATCTTCAAGTGTGGCTGATAAAATTGCCCTGAACTGGTTGGTGAAGAA
GGATTTGTAGTGACCGAAGCTGGCTTTGGTGTGACATCGGAATGGAGAAATTTCTCAACATCAAGTGCCGAGCT
TCCGGCTTGGTGCCCAACGTGGTTGTGTTAGTGGCAACGGTGCAGCTCTGAAGATGCATGGAGGCGGGCCAAGT
GTAACGGCTGGTGTCTCTTAAGAAAGAATATACAGAGGAGAATCCAGCTGGTGGCAGACGGCTGCTGTAAC
CTCAGAAGCAAATTCAGATCACTCAGCTCTTTGGGGTTCCCGTTGTGGTGGCTCTGAATGTCTTCAAGACCGAC
ACCCGCGCTGAGATTGACTTGGTGTGTGAGCTTGCAAAGCGGGCTGGTGCCTTTGATGCAGTCCCCTGCTATCAC
TGGTCCGTTGGTGGAAAAGGATCGGTGGACTTGGCTCGGGCTGTGAGAGAGGCTGCGAGTAAAAAGAGCCGATT
CAGTTCTGTATGATGTTTCAAGTTCCAATTGTGGACAAGATAAGGACCATTGCTCAGGCTGTCTATGGAGCCAAA
GATATTGAACTCTCTCTGAGGCACAAGCCAAAATAGATCGTTACACTCAACAGGGTTTTGGAAATTTGCCCATC
TGCATGGCAAAGACCCACCTTTCTCTATCTACCAACCTGACAAAAAGGTGTGCCAAGGGACTTCATCTTACCT
ATCAGTGACGTCCGGCCAGCATAGGCGCTGGGTTCATTTACCCTTTGGTCCGAACGATGAGCACCATGCCAGGA
CTGCCCCACCGGCCCTGCTTTTATGACATAGATCTTGATACCGAAACAGAACAAGTTAAAGGCTTGTCTAAGTG
GACAAGGCTCTCAGAGACCCGATGCAGACTCTGAAACAGACTACTCTTTGCCTTTTGTGTCAGTTGGAGAAG
AAACTGAATTTGAAAAATGTCTGTTATGCAATGCTGGAGACATGGTGAATAGGCCAAAGATTTCTCTCTGCTC
AAGATGAATTTGTTACAGTGGAGTATGGTGTTCGGCAAAGGACCTCCACCAAGACTGAAAGAACTAATTTA
TTTCTGTTTCTGTGGAGTTTCCATTATTTCTACTGCTTACACTTTAGAATGTTTATTTTATGGGGACTAAGGGAT
TAGGAGTGTGAACTAAAAGGTAACATTTTCCACTCTCAAGTTTTCTACTTTGTCTTTGAACTGAAAAATAACATG

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FIGURE 2124B

GATCTAGAAAACC

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FIGURE 2125

MVSSGRRWLREQQHRRWRLHCLKLQPLSPVPSDIEISRGQTPKAVDVLAKEIGLLADEIEIYGKSKAKVRLSVLE
RLKDQADGKYVLVAGITPTPLGEGKSTVTIGLVQALTAHLNVNSFACLRQPSQGPTFGVKGGAAGGGYAQVIPME
EFNLHLTGDIAITAANNLLAAIDTRILHENTQTDKALYNRLVPLVNGVREFSEIQLARLKIIRNWE

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FIGURE 2126

ACTCTTGGGAAAAGCTGCTGGGCACCGTCGTCGCGCTGAAGGTGGTTCTGTACCTGCTCCGAGTGTGCTTAGCGAT
GGCCTGGAAATCCGGCGGCGCCAGCCACTCGGAGCTAATCCACAATCTCCGCAAAAATGGAATCATCAAGACAGA
TAAAGTATTTGAAGTGATGCTGGCTACAGACCGCTCCCACTATGCAAAATGTAACCCATACATGGATTCTCCACA
ATCAATAGGTTTTCAAGCAACAATCAGTGCTCCACACATGCATGCATATGCGCTAGAACTTCTATTTGATCAGTT
GCATGAAGGAGCTAAAGCTCTTGATGTAGGATCTGGAAGTGGAATCCTTACTGCATGTTTTGCACGTATGGTTGG
ATGTACTGGAAAAGTCATAGGAATTGATCACATTAAAGAGCTAGTAGATGACTCAGTAAATAATGTCAGGAAGGA
CGATCCAACACTTCTGTCTTCAGGGAGAGTACAGCTTGTTGTGGGGGATGGAAGAATGGGATATGCTGAAGAAGC
CCCTTATGATGCCATTTCATGTGGGAGCTGCAGCCCCGTGTTGTACCCAGGCGCTAATAGATCAGTTAAAGCCCGG
AGGAAGATTGATATTGCCTGTTGGTCCTGCAGGCGGAAACCAAATGTTGGAGCAGTATGACAAGCTACAAGATGG
CAGCATCAAAATGAAGCCTCTGATGGGGGTGATATACGTGCCTTTAACAGATAAAGAAAAGCAGTGGTCCAGGTG
GAAGTGAATTTTATCTTCTGCTCTTTCTTCTTCCACACATGCAAGGGATGAATTGTAAAAGCAACATCAGCTTGAC
CAGTATAAAATTACAGTGGATTGCTCATCTCAGTCCTCAAAGCTTTTTGAAAACCAACACCATCACAGCTTGTTT
TGGACTTTGTTACACTGTTATTTTCAGCATGAAAATGTGTGTTTTTTAGGGTTTCTGATTCTTCAAAGAGGCAC
AGAGCCAAATTGGTAGAGGAAGGATGCAAAGTATAAATTTGTGTAATATTACTTTAACATGCCCATATTTTACTT
GGAAATATTAAAAAGAAAGGGTTCTGTAAATGGAAAACCTAGTTTGTGAATTGATTTTGAGGAGTGGTTTTCTT
TTCTTGGACACTTAATTCTGTTCTGATATTAATTTATCAGATTGCTTTTGTGCATTGGATAACACCACCATTCAC
AAGTTAAGATTCTTGGTATTTGGATATCTGTTAGATGCTACTAAGAAAATAGAGATGAGCTTTCTTTTAAAGCT
TTTGATGTGGTGTCATAGAATAGCATGTTGTAGATACAATCAGCTGCTTTGTTACCTTAAACTAGGCATTGTGA
AATATTAAACCTTAAGATGGCAGGTGATGTCCTGTAAACACTCAGCTGTTTCAGATTGGACATAACTGACTTAGTT
CTTCCCTTCTCTCTCTCTCAAAATTATAGGAGACTTGTAGTTTAGTGTGGTTTTCTGTTTCTAATTTGCTGCTGA
TAATGTATATGAACCTAACATGCTGTGTAAGCTGTGTCCTAGTTCTTGAACAGTTTATGCAGTGCTGCTTTGCCA
AATAAGTTAAAAGTAAAAGAGGC

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FIGURE 2127

MAWKSGGASHSELIHNLRKNGI IKTDKVFEVMLATDRSHYAKCNPYMDSPQSIGFQATISAPMHAYALELLFDQ
LHEGAKALDVGSGSGILTACFARMVGCTGKVIGIDHIKELVDDSVNNVRKDDPTLLSSGRVQLVVG DGRMGY AEE
APYDAIHVGAAAPVVPQALIDQLKPGGRLILPVGPAGGNQM LEQYDKLQDGS IKMKPLMGVIYVPLTDKEKQWSR
WK

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FIGURE 2128A

ACTCTGGCAAGTTGCGGGCGCGCGGGGAGCTGTGCGGGGACGCGGCCCTCGGGAGGACGTGGCCCCGGCCCCG
CCCCAGTGGGCCCCGACCCTCATGGCCCTGAGCAAAGGGCTGCGGCTGCTGGGGCGCCTGGGGGCCGAGGGGGAC
TGTAGCGTGCTGCTGGAGGCGCGCGGCCGCGACGACTGCCTGCTGTTTCGAGGCCGGCACGGTGGCCACGCTGGCT
CCAGAAGAAAAGGAAGTCATTAAAGGACAGTATGGCAAGCTCACGGACGCGTACGGCTGCCTGGGGGAGCTGAGG
CTGAAATCTGGTGGCACGTCTCTGAGCTTCTTGGTGTGGTGACAGGCTGCACATCTGTGGGCAGAATTCAGAT
GCTGAAATCTACAAAATCACTGCCACTGACTTTTACCCTCTTCAGGAAGAGGCCAAGGAGGAGGAACGCCTCATA
GCTTTGAAGAAAATCCTCAGCTCGGGGGTGTCTATTTCTCATGGCCAAACGATGGGTCTCGCTTTGACCTGACT
GTCCGCACGCAGAAGCAGGGGGATGACAGCTCTGAATGGGGGAACCTCTTCTTCTGGAACCAGCTGTTGCACGTG
CCCTTGAGGCAGCACCAGGTGAGCTGCTGTGACTGGCTGCTGAAGATCATCTGCGGGGTGGTCACCATCCGCACC
GTGTATGCCTCCACAAAGCAGGCCAAGGCCTGCCTCGTCTCTCGCGTTAGCTGTGAGCGCACAGGCACTCGCTTC
CACACCCGTGGCGTGAACGACGACGGCCATGTGTCCAACCTTCGTGGAGACAGAGCAGATGATTTACATGGACGAT
GGAGTGTCTATCTTTTGTCCAGATCAGAGGCTCCGTTCCGCTGTTCTGGGAACAGCCAGGGCTTCAGGTTGGCTCC
CATCATCTGAGACTCCACAGAGGCCTGGAAGCCAATGCCCTGCTTTCGACAGGCACATGGTGTCTCTGAAGGAG
CAGTACGGGCAGCAGGTGGTCTGTGAACCTTCTGGGAAGCAGAGGCGGAGAGGAGGTGCTCAACAGAGCCTTCAAG
AAGCTGCTCTGGGCTTCTTGCCACGCGGGCGACACGCCTATGATCAATTTGACTTCCATCAGTTTGCCAAAGGT
GGGAAGCTAGAGAAATTGGAGACCCTCTTGAGGCCACAGTTAAAGCTGCACTGGGAAGACTTCGATGTGTTTACA
AAGGGGGAGAACGTGAGTCCACGTTTTCAGAAAGGCACCTTGCGGATGAAGTGTCTTGACTGCCTGGACCGAACC
AACACTGTGACAGCTTCATCGCGCTCGAGGTCTGCATCTGCAGCTCAAGACCCTGGGGCTGAGTTCAAAACCC
ATCGTTGACCGCTTTGTGGAGTCTTCAAAGCCATGTGGTCTCTGAATGGCCACAGCCTGAGCAAGGTGTTTACA
GGCAGCAGAGCCCTGGAAGGGAAGGCCAAGGTGGGGAAGCTGAAGGATGGAGCCCGGTCCATGTCTCGAACCATC
CAGTCCAACCTTCTTCGACGGGGTGAAGCAGGAGGCCATCAAGCTGCTGCTGGTGGGGACGTCTACGGCGAGGAG
GTGGCAGACAAAGGGGGCATGCTGCTGGACAGCAGGCGCTCCTGGTACTCCAGGATCCTGAAAGCTATGACT
GAGCGTCAGTCCGAATTCACAAATTTCAAGCGGATCCGGATTGCTATGGGGACCTGGAACGTGAACGAGGAAAG
CAGTTCGGGAGCAACGTGCTCAGGACGGCGGAGCTGACAGACTGGCTGCTCGACTCGCCCCAGCTCTCGGGAGCT
ACCGACTCCAGGATGACAGCAGCCAGCTGACATATTTGCTGTGGGGTTGAAGAGATGGTGGAAATTGAGCGCA
GGGAATATTGTCAATGCCAGTACTACCAACAAGAAGATGTGGGGTGAACAGCTTCAGAAAGCCATCTCACGCTCT
CATAGATACATTCTGTTGACTTCGGCACAGCTGGTGGGCGTCTGTCTTTATATCTTTGTACGTCCATACCATGTC
CCGTTTCATCAGGGACGTAGCCATCGACACAGTGAAGACGGGCATGGGGGGCAAGGCGGGGAACAAGGGCGCCGTC
GGCATCCGCTTCCAGTTCCACAGCACCAGCTTCTGCTTCATATGTAGTACCTGACGGCCGGGCAGTCCCAGGTG
AAGGAGCGGAATGAAGACTACAAGGAGATCACCAGAACTCTGCTTCCCAATGGGGAGAAATGTTTTTCTCAT
GATTATGTATTTTGGTGTGGCGATTTCAACTACCGCATTGATCTTACTTATGAAGAAAGTCTTCTATTTTGTAA
CGCCAAGACTGGAAGAACTTCTGGAATTTGATCAACTACAGCTACAGAAATCAAGTGGAAAAATTTTAAAGGAC
TTTCACGAAGGAGCCATTAACCTTTGGACCCACCTACAAGTATGACGTGGCTCAGCCGCTACGATACAAGCGAC
AAATGCCGCACCCCCGCTGGACAGACAGGTGCTGTGGTGGAGGAAGAAACATCCCTTTGATAAAACAGCTGGA
GAACTCAACCTTCTAGACAGTGATCTAGATGTTGACACCAAAGTCAGACACACCTGGTCTCCTGGTGCCCTGCAG
TATTATGGTCTGTCGGAGCTACAAGCGTCTGATCACAGACCTGTGCTGGCGATCGTGGAGGTGGAAGTTCAGGAA
GTCGATGTGGGTGCTCGGGAGAGGGTTTTCCAGGAAGTGTCTCCTTCCAGGGCCCCCTGGATGCCACTGTTGTA
GTAAACCTTCAATCACCAGCTTAGAAGAGAAAAACGAGTTTCCAGAGGACCTGCGTACTGAGCTCATGCAGACC
TTGGGGAGTTATGGGACAATTGTTCTTGTGAGGATCAACCAAGGGCAGATGCTGGTAACTTTTGACAGAGTCAC
TCGGCTCTCAGTGTCTGGACGTGGACGGTATGAAGGTGAAAGGCAGAGCAGTGAAGATTAGACCGAAGACCAAG
GACTGGCTGAAAGGTTTTCGAGAGGAGATCATTCGGAACGAGACAGCATGGCCCCCGTGTCTCCCACTGCCAAC
TCCTGTTTGTGCTGGAGAAAACCTTTGACTTCACAAGTTTGGACTATGAGTCAGAAGGGGATATTCTTGAAGACGAT
GAAGACTACTTGGTGGATGAATTCATCAGCCTGGAGTCTCGGACAGTGAAGTTCGGGGGAGACGACCTCTCTGAT
GTCCCCGGCCCCACAGCACTGGCTCCTCCAGCAAGTCACCTGCTCTCACCAAAAAGAAGCAGCATCCAACGTAC
AAAGATGACGCGGACCTGGTGGAGCTCAAGCGGGAGCTGGAAGCCGTGCGGGAGTTCGCCACCGTTCTCCGAGC
AGGTCTCTGTGCTGCCCAACCGGCCCTCGGCCACCTCAACCCCCGAGAGACCCCCCTCCAACCGGTTTTAATG
GTGAAAAAGTCGGCTTCAGATGCGTCCATCTCCTCCGGCACCCATGGACAGTATTCAATTTTGCAGACGGCAAGA
CTTCTACCAGGAGCACCTCAGCAACCTCCCAAGGCTCGGACTGGAATAAGTAAACCTTATAATGTCAAGCAGATC

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FIGURE 2128B

AAAACCACCAATGCCAGGAGGCAGAAGCAGCAATCCGGTGTCTCCTGGAAGCCAGAGGAGGTGCCTCCGAAGAA
GCCCTAAGTGCCGTGGCCCCAAGGGACCTTGAAGCATCCTCTGAACCAGAGCCCACACCGGGGGCAGCCAAACCA
GAGACCCACAGGCGCCCCACTCCTTCCCCGTCGGCCCCCAGCCAGAGTTCCTGCCATCAAGAAGCCAACCTTG
AGAAGGACAGGAAAGCCCCCTGTACCGGAAGAAGAGTTTGTAGCAACAGACTGTCCATTTTACAATCGGGCCCCCG
GAGACAAGCGTTGAGGCCCCCTCTGTGCTGACAGCCCCCTCGAGTCCCTCCTGTTCCTCAAACCAAGAACATTTTACG
CCTGGGAAAGCTGCAGAGAGGCCAAGCCACAGGAAGCCAGCATCAGACGAAGCCCCCTCCTGGGGCAGGAGCCTCT
GTGCCACCACCTCTGGAGGCGCCGCCTCTTGTGCCAAGGTACCCCCGAGGAGGAAGAAGTCAGCCCCCGCAGCC
TTCCACCTGCAGGTCTCTGCAGAGCAACAGCCAGCTTCTCCAGGGCCTCAGTTACAATAGCAGTGACAGCCCCCTCT
GGGACCCACCTGCCGCGGGCACCCTCTTCCACAAGGGGACTTTCTCAGCACTTCATCTGCTACAAGCCCCGAC
AGCGATGGCACCAAGCGATGAAGCCAGAGGCAGCCCCACTTCTTGGTGATTATCAGGACCCCTTCTGGAACCTT
CTTACCACCCCTAAACTGTTGAATAACACTTGGCTTTCTAAGAGCTCAGACCCCTTGGACTCAGGAACCAGGAGC
CCCCAAAGAGATCCCATAGACCCAGTGTGAGCTGGCGCTTCAGCTGCCAAGGCAGAGCTGCCACCAGATCATGAA
CACAAAACCTTAGGTCACTGGGTGACAATCAGTGACCAAGAAAAGAGGACAGCACTGCAGGTGTTTGACCCACTG
GCAAAAACATGACTGAGCAGCTTTGAAGGCTGCAGTCTTATAGAATGCATACCTTCCTCCCTCTAGACATCCCTC
CACCAGAAGAGACATCTATTTAAAGGCACACTGGCCAAAACGTTTGTGCATCTGTCACTCTCGTGTAGTTTACAA
AAATCGTGTCTCTTATTTCAGTAAGATGGTTACTCAGCCACCAAAATATATTTCACTCAAGGCTTGATCATCTGAA
GTTTGTCTCTTCAAGGAATGGGAACCTTCCTGTTAAATTCGGTGTATGGATTTTAAGAAAGGAATCTAGCCAAATGA
GGTCCAAGAAGTTCTCACCATTGAATTTTAAATGGCTGTTTCAAGTTCATGTTGTACGTGATGGAGATTTGTCTT
TTGTTTTATTTGCATTTTACAGATTTGGTATAACATTTTGGGGAGCCACCTGAAGGTTGATGTATAAAGTAAGGA
TTAGAGAAGAGGTCGTTGTGACCATTAGTAGCTGTCTGGCCCACTTAAACAAGGTTACAAAAATCAGAGTCG
GAAGCAGCCAAATAGGTCAACCTAATGACTAGACTGTACATTCCTATGAGCCTTCATGTTAAGTGTGTACATGT
GCGTTAACCTTGTATGATGCGTGAATCCCGAGGGAGCCGGTGGCATAACCGTTAGCTTAACCTTAGCTTAAACTA
GCTGAAGGCTCCTGTGCCATGTCTTAGACATTGCATGCCCTATCAATTACTATAATCCTGAGCCATGGTGTGCTA
CTGAAACCAATTTTTATCCACCATTAGTCTTATTAAATGAAACCTCACGGATCCTTTGTTCCGCTTATATTC
ATGCATACCACATAAAAGCACACAGTGCAGAAACTCTTGCTGATACGCGATATGATTCTCATTTGTTAGAATATG
GAGAGTGTTCAGCCTCGTCTGTCCGGCTGGAGCTTCGGGATGGAAAGTGCTATGTGTCCCTGCATATAAGAATC
ACCAGGCCAGTGTTCCTGGGTTTGTCTGTCTATATGTTTGTCTATATTTTTCCTATACATTTTCCACGTTT
CCAACAGCACTTCTCACCTATTCAATAACTGAAAAGACATTACCATAGTGCTTTACATTTTAAAGTAATGTTA
CAAGGTCTGGAATCCATTTGGAGCAGATACCGTGTTTTTCGCTATTTAATAAGAAGTTCAGTAGTGAAATCTTACT
GTACCGCCTGTTGTATCTGGGAGCCTCGTACAGAGGCTCGCACAGCAGTGATCAAGTGTCATCCCTTACGTGACT
GGGGGATGTCTGTCTTAAAGCTGACTGCTAGGATAGTAAGGATCATCTTGCCTGGGCTATGCCACTGTCTTGT
ACCAATTAGACATCTGGAATTTTATAATTAGTTTTTCTTGTCACTGTCAAGATATATTGCAGATTACTTAAATAT
GGCCATCAAAACAAAAGTTACAACACGTATCTCTTTTCTATCTGAAAACTAATACTGGAAAAAGGATAAAAAA
AAGGAATCCGTGACCCACAGAGCTAGACAGATAAGATGCATAGTTGACCAGTCAATAAAGCGGTGTTTAGGTGA
TCAGGATGCCGTTGGTGGCATTACGTGCTTTATATGATTTTTTACCTCTGTAAACAAACACAAGAAATAAACAGAA
TGGTCCTTAACAGAGTTTGGGGGAGAGAGCAAGATGGGTTCCTTGGAGAAGCTGATTTGCCAAGATGCACATCGC
TATTAACAGCCAGAGTCATAAATGAAATGAAATTGAAGAATTCATTCAAATGCTCTTTTCCCTATAACCTCTTTT
CTCACCAAAAAGGAGATAAATTTGAAAACAGATAAATGTAAACACCAGTCAAAGAAGCAGGGGAAAAGTAAGCTC
CTCCAAAGTTGCTTGCAGTGCTGGAAATAGATCTCATTTTTTAGGTTTTCTCTTCTGTTCCAGATACCAATAAATG
GGACAGAGAATAAATTTTGTAAAATATGTGCTCATCTCTAAGTAGCTCTTCAGAGTCTGACCGTAAGTAA
AACACACAGAATTGTGTTGACTGGGGGAGGTGAATCACAAAAAGTTACGAGGAGTTTAAAGATTAAATATTATT
TGATCGTGGCTGTCAAATTTAGTGAACAACATAGATTGGATTTGGAGTTGGTAGGTAGGTATGGTTCTCATACCAG
AATTCTCTTAAAAAAGGACAATTGGAATTGCCTTATTTATTTTAAATCAATGCTTACTAGTTGGT
AGGATTCACAGTCAAGCAGAGGTTGATTAAATAATCTTGACAATGAGCAGCTGCCATCTTGGGGGATTTTCAAT
CTGTGGTTTTTAAATGTTTCGTCTTTGATGCTACCATCCAGGGCTTCTTATTGTGACCTTGTAGCCTATTTTGT
TCCTGCTGTCTCTAACATGGTGCAGTTCACGCAGACTGGTTTAGGTACTTCACAACTCACCATTGTCTCTCTGA
CCCCAAGCCTAGTCCCTTTTACATCACCATCTTCTCAGACTTCTTGCTATTCTTAAATATGTTTTGGTTAATG
ATTGAATTAGGACATCAGCTTAAGCAATTCCTGTAACGGTTTAAAGTTGTTGAAGTTCAAGGCACATAATAAAT

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FIGURE 2128C

TCTCCCTGATGTGTGTGTAAGTATAAACAAAGTAATGTATCAAAGCGTTCAC TTTATAATGAAGTCATTTTCATTG
GGAAGGAAAGCTGCAAAGATTATTGGGGGACTAGTGATTAATAAAATCCTGTAATATTTTGAAGTGAAAATTTG
TACTGAAATTGTACATGATACCTATTAAATGTTTTTGTC TTTTTT

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FIGURE 2129

MALSKGLRLLGRLGAEGDCSVLLEARGRDDCLLFEAGTVATLAPEEKEVIKQYGKLTDAYGCLGELRLKSGGTS
LSFLVLVTGCTSVGRIPDAEIIYKITATDFYPLQEEAKEERLIALKKILSSGVFYFSWPNDGSRFDLTVRTQKQG
DDSSEWGNSSFFWNQQLLHVPLRQHQVSCCDWLLKIICGVVTIRTIVYASHKQAKACLVSRVSCERTGTRFHTRGVND
DGHVSNFVETEQMIYMDDGVSSFVQIRGSVPLFWEQPGLQVGSHELLRLHRLGLEANAPAFDRHMLLKEQYGOQV
VNLLGSRGGEVLNRAFKKLLWASCHAGDTPMINFDFHQFAKGGKLEKLETLLRPQLKLHWEDFDVFTKGENVSP
RFQKGTLRMNCLDCLDRINTVQSFIALEVLHLQLKTLGLSSKPIVDRFVESFKAMWSLNGHSLSKVFTGSRLEG
KAKVGKLDGARSMSRTIQSNFFDGVKQEAIKLLLVGDVYGEVADKGGMLLDSTALLVTPRILKAMTERQSEFT
NFKRIRIAMGTWNVNGGKQFRSNVLRTAELTDWLLDSPQLSGATDSQDDSSPADIFAVGFEEMVELSAGNIVNAS
TTNKKMWGEQLQKAISRSRYILLTSAQLVGVCLYIFVRPHYVFPFIRDVAIDTVKTGMGGKAGNKGAVGIRFQFH
STSFCFICSHLITAGQSQVKERNEDYKEITQKLCFPMGRNVFSDYVFWCGDFNYRIDLTYYEEVFYFVKRQDWKKL
LEFDQLQLQKSSGKIFKDFHEGAINFGPTYKYDVGSAAYDTSKCRTPAWTDRVLWWRKKHPFDKTAGELNLLDS
DLDVDTKVRHTWSPGALQYYGRAELQASDHRPVLAIVEVEVQEVQVVGARERVFQEVSSFQGPLDATVVVNLSPT
LEEKNEFPEDLRTELMQTLGSYGTIVLVRINQGMVLTFADSHSALSVLDVDGMKVKGRAVKIRPKTKDWLKGRL
EEIIRKRDSPMAPVSPTANSCLEENFDFTSLDYSESGDILEDDEDYLVDEFNQPGVSDSELGGDDLSDVPGPTAL
APPSKSPALTKKKQHPTYKDDADLVELKRELEAVGEFRHRSPSRSLSVPNRPRPPQPPQPPPTGLMVKKSASD
ASISSGTHGQYSILQTARLLPGAPQQPPKARTGISKPYNVKQIKTTNAQEAEEAIRCLLEARGGASEEALSAVAP
RDLEASSEPEPTPGAAPETPQAPPLPRRPPPRVPAIKKPTLRRTGKPLSPREEQFEQQTIVHFTIGPPETSVEAP
PVVTAPRVPPVPKPRTFQPGKAAERPShRKPASDEAPPGAGASVPPPLEAPPLVPKVPFRRKKSAPAAFLQVLQ
SNSQLLQGLTYNSSDSPSGHPPAAGTVFPQGDFLSTSSATSPDSDGKAMKPEAAPLLGDYQDPFWNLLHHPKLL
NNTWLSKSSDPLDSGTRSPKRDPIPVSAASAELPPDHEHKTILGHWVTISDQEKRTALQVFDPLAKT

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FIGURE 2130

AGGCAGGGCGGGCGGGCGCTCTAAGGGTTCTGCTCTGACTCCAGGTTGGGACAGCGTCTTCGCTGCTGCTGGATA
GTCGTGTTTTTCGGGGATCGAGGATACTCACCAGAAACCGAAAATGCCGAAACCAATCAATGTCCGAGTTACCACC
ATGGATGCAGAGCTGGAGTTTGCAATCCAGCCAAATACAACCTGGAAAACAGCTTTTTGATCAGGTGGTAAAGACT
ATCGGCCCTCCGGGAAGTGTGGTACTTTGGCCTCCACTATGTGGATAATAAAGGATTTCTTACCTGGCTGAAGCTG
GATAAGAAGGTGTCTGCCCAGGAGGTGAGGAAGGAGAATCCCTCCAGTTCAAGTTCGGGGCAAGTTCTTACCTT
GAAGATGTGGCTGAGGAGCTCATCCAGGACATCACCAGAACTTTTTCTTCTCCAAGTGAAGGAAGGAATCCTT
AGCGATGAGATCTACTGCCCCCTGAGACTGCCGTGCTCTTGGGGTCCACGCTGTGCAGGCCAAGTTTGGGGAC
TACAACAAAGAAGTGACAAGTCTGGGTACCTCAGCTCTGAGCGGCTGATCCCTCAAAGAGTGATGGACCAGCAC
AACTTACCAGGGACCAGTGGGAGGACCGGATCCAGGTGTGGCATGCGGAACACCGTGGGATGCTCAAAGATAAT
GCTATGTTGGAATACCTGAAGATTGCTCAGGACCTGGAAATGTATGGAATCAACTATTTTCGAGATAAAAAACAAG
AAAGGAACAGACCTTTGGCTTGGAGTTGATGCCCTTGGACTGAATATTTATGAGAAAGATGATAAGTTAACCCCA
AAGATTGGCTTTCTTGGAGTGAAATCAGGAACATCTCTTCAATGACAAAAAGTTTGTCAATTAACCCATCGAC
AAGAAGGCACCTGACTTTGTGTTTTATGCCCCACGTCTGAGAATCAACAAGCGGATCCTGCAGCTCTGCATGGGC
AACCATGAGTTGTATATGCGCCGCAGGAAGCCTGACACCATCGAGGTGCAGCAGATGAAGGCCCAGGCCCGGGAG
GAGAAGCATCAGAAGCAGCTGGAGCGGCAACAGCTGGAAACAGAGAAGAAAAGGAGAGAAAACCGTGGAGAGAGAG
AAAGAGCAGATGATGCGCGAGAAGGAGGAGTTGATGCTGCGGCTGCAGGACTATGAGGAGAAGACAAAGAAGGCA
GAGAGAGAGCTCTCGGAGCAGATTAGAGGGCCCTGCAGCTGGAGGAGGAGAGGAAGCGGGCACAGGAGGAGGCC
GAGCGCCTAGAGGCTGACCGTATGGCTGCACTGCGGGCTAAGGAGGAGCTGGAGAGACAGGCGGTGGATCAGATA
AAGAGCCAGGAGCAGCTGGCTGCGGAGCTTGCAAGTACACTGCCAAGATTGCCCTCCTGGAAGAGGCGCGGAGG
CGCAAGGAGGATGAAGTTGAAGAGTGGCAGCACAGGGCCAAAGAAGCCAGGATGACCTGGTGAAGACCAAGGAG
GAGCTGCACCTGGTGTATGACAGCACCCCGCCCCACCACCCCGGTGTACGAGCCGGTGAGCTACCATGTCCAG
GAGAGCTTGCAAGATGAGGGCGCAGAGCCCACGGGCTACAGCGCGGAGCTGTCTAGTGAGGGCATCCGGGATGAC
CGCAATGAGGAGAAGCGCATCACTGAGGCAGAGAAGAAGCAGCGTGTGCAGCGGCAGCTGCTGACGCTGAGCAGC
GAGCTGTCCCAGGCCCAGATGAGAATAAGAGGACCCACAATGACATCATCCACAACGAGAACATGAGGCAAGGC
CGGGACAAGTACAAGACGCTGCGGCAGATCCGGCAGGGCAACACCAAGCAGCGCATCGACGAGTTTCGAGGCCCTG
TAACAGCCAGGCCAGGACCAAGGGCAGAGGGGTGCTCATAGCGGGCGTGCCAGCCCCGCCACGCTTGTGTCTTT
AGTGCTCCAAGTCTAGGAACTCCCTCAGATCCCAGTTCCCTTTAGAAAGCAGTTACCCAACAGAAACATTCTGGGC
TGGGAACCAGGGAGGCGCCCTGGTTTGTCTTCCCAAGTTGTAATAGTGCCAAGCAGGCCTGATTCTCGCGATTAT
TCTCGAATCACCTCCTGTGTGTGCTGGGAGCAGGACTGATTGAATTACGGAATAATGCCTGTAAAGTCTGAGTAA
GAACTTCAATGCTGGCCTGTGTGATACAAGAGTCAGCATCATTAAGGAAACGTGGCAGGACTTCCATCTGTGCC
ATACTTGTCTGTATTGAAATGAGCTCAAATTGATTTTTTAATTTCTATGAAGGATCCATCTTTGTATATTTAC
ATGCTTAGAGGGGTGAAAATTATTTTGAAATTGAGTCTGAAGCACTCTCGCACACACAGTGATTCCCTCCTCCC
GTCACCTCACGAGCTGGCAGAGAGCACAGTGATCACCAGCGTGAGTGGTGGAGGAGGACACTTGGATTTTTTTT
TTTGTTTTTTTTTTTTTTGGCTTAACAGTTTTAGAAATACATTGTACTTATACACCTTATTAATGATCAGCTATATA
CTATTTATATACAAGTGATAATACAGATTGTAAACATTAGTTTTAAAAAGGGAAAGTTTTGTCTGTATATTTG
TTACCTTTTACAGAATAAAAGAATTACATATGAAAAACCTCTAAACCATGGCACTTGATGTGATGTGGCAGGAG
GGCAGTGGTGGAGCTGGACCTGCCTGCTGCAGTCACGTGTAAACAGGATTATTATAGTGTTTTATGCATGTAAT
GGACTATGCACACTTTTAATTTTGTGAGTTTACACATGCCACTATGAGCTTTCAGACTCCAGCTGTGAAGAGAC
TCTGTTTGTCTGT
GAGGCCGTGGTTCCGCCCACTCATTCCTTCTCGTGCACTGCTTTCTCCTTCACAGCTAAGATGCCATGTGCAGG
TGGATTCCATGCCGCAGACATGAAATAAAAGCTTTGCAAAGGCA

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FIGURE 2131

ATCTTCCGGTAATTCGCCAAAATGACGAACACAAAGGGAAAGAGGAGAGGCACCTGACATATGTTCTCTAGGCCT
TTTAGAAAACATGGAATGGGTACTGTTCAAAAAGGAATGCCCCACAAGTGTCAACCATGGCAAACTGGGAGTCTA
CGATGTTCCCCAGCATGCTGTTGGCATTGTTGTAAACAAACAAGTTAAGGGCAAGATTCTTGCCAAGAGAATTAA
TGTGCGTATTGAGCACATTACGCACTCTAAGAGCCGAGATAGCTTCCTGAAACGCGTGAAGGAAAATGATCAGAA
AAAGAAAGAAGCCAAAGAGAAAGGTACCTGGGTTCAGCTAAAGCGCCAGCCTGCTCCACCCAGAGAAACACACTT
TGTGAGAACCAATGGGAAGGAGCCTGAGCTGCTGGAACCTATTCCCTATTAATTCATGGCATAATAGGTGTTAAA
AAGAAAAATAAA

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FIGURE 2132

GGCAGCGCAGGGCAGACGGCGGCAGGAGAAGCAAGATGAATGCAGGCTCAGATCCTGTGGTCATCGTCTCGGCGG
CGCGGACCATCATAGGTTTCCTTCAATGGTGCCTTAGCTGCTGTTCCCTGTCCAGGACCTGGGCTCCACTGTCATCA
AAGAAGTCTTGAAGAGGGCCACTGTGGCTCCGGAAGATGTGTCTGAGGTCATCTTTGGACATGTCTTGGCAGCAG
GCTGTGGGCAGAATCCTGTAGACAAGCCAGTGTGGGTGCAGGAATCCCTACTCTGTTCCAGCATGGAGCTGCC
AGATGATCTGTGGGTGAGGCCTAAAAGCTGTGTGCCTTGCAAGTCCAGTCAATAGGGATAGGAGACTCCAGCATTG
TGGTTGCAGGAGGCATGGAAAATATGAGCAAGGCTCCTCACTTGGCTTACTTGAGAACAGGAGTAAAGATAGGTG
AGATGCCACTGACTGACAGTATACTCTGTGATGGTCTTACAGATGCATTTACAACTGTCATATGGGTATTACAG
CTGAAAATGTAGCCAAAAAATGGCAAGTGAGTAGAGAAGATCAGGACAAGGTTGCAGTTCTGTCCCAGAACAGGA
CAGAGAATGCACAGAAAGCTGGCCATTTTGACAAAGAGATTGTACCAGTTTTGGTGTCAACTAGAAAAGGTCTTA
TTGAAGTTAAACAGATGAGTTTCTCGCCATGGGAGCAACATAGAAGCCATGTCCAAGCTAAAGCCTTACTTTC
TTACTGATGGAACGGGAACAGTCACCCAGCCAATGCTTCAGGAATAAATGATGGTGTGTCAGCTGTCTGTTCTTA
TGAAGAAGTCAGAAGCTGATAAACGTGGGCTTACACCTTTAGCACGGATAGTTTCTGGTCCCAAGTGGGTGTGG
AGCCTTCCATTATGGGAATAGGACCAATTCCAGCCATAAAGCAAGCTGTTACAAAAGCAGGTTGGTCACTGGAAG
ATGTTGACATATTTGAAATCAATGAAGCCTTTGCAGCTGTCTCTGCTGCAATAGTTAAAGAACTTGGATTAAACC
CAGAGAAGGTCAATATTGAAGGAGGGGCTATAGCCTTGGGCCACCTCTTGGAGCATCTGGCTGTGCAATTCTTG
TGACCCTGTTACACACACTGGAGAGAATGGGCAGAAGTCGTGGTGTGTCAGCCCTGTGCATTGGGGGTGGGATGG
GAATAGCAATGTGTGTTGAGAGAGAAATGAATGCTTAACTTTGAACAACCTCAATTTCTTTTAACTAATAAA
GTACTAGGTTGCAATATGTGAAATCAGAGGACCAAAGTACAGATGGAAACCATTTCTTACATCACAAAAACCCAA
GTTTACAGCTTGTTACTTTTACTTTAATGTGTAATACTCAACTCAAGGTACAAGACAATTGCATTTAACATTGTTAT
AAATAAAAGGAACATCAGATCAATCATT

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FIGURE 2133

MNAGSDPVVIVSAARTIIGSFNGALAAVPVQDLGSTVIKEVLKRATVAPEDVSEVIFGHVLAAGCGQNPVRQASV
GAGIPYSVPAWSCQMICGSGLKAVCLAVQSIGIGDSSIVVAGGMENMSKAPHLAYLRTGVKIGEMPLTDSILCDG
LTDAFHNCHMGITAENVAKKWQVSREDQDKVAVLSQNRTEAQAQAGHFDKEIVPVLVSTRKGLIEVKTDEFPRHG
SNIEAMSKLKPYFLTDGTGTVTPANASGINDGAAAVVLMKKSEADKRGLTPLARIVSWSQVGVEPSIMGIGPIPA
IKQAVTKAGWSLEDVDIFEINEAFAAVSAAIVKELGLNPEKVNIEGGAIALGHPLGASGCRILVTLTLHTLERMGR
SRGVAALCIGGGMGIAMCVQRE

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FIGURE 2134

ACGTGTATCGCTGCCGTCAAGATGGAGGGGCCCTTTGTCCGTGTTCCGGTGACCGCAGCACTGGGGAAACGATCCGC
TCCCAAACGTTATGGCTGCAGCTTCGATTGCCAATATTGTAAAAAGTTCTCTTGGTCCAGTTGGCTTGGATAAA
ATGTTGGTGGATGATATTGGTGATGTAACCATTACTAACGATGGTGCAACCATCCTGAAGTTACTGGAGGTAGAA
CATCCTGCAGCTAAAGTTCTTTGTGAGCTGGCTGATCTGCAAGACAAAGAAGTTGGAGATGGAACACTTTCAGTG
GTTATTATTGCAGCAGAACTCCTAAAAAATGCAGATGAATTAGTCAAACAGAAAATTTCATCCCACATCAGTTATT
AGTGGCTATCGACTTGCTTGCAAGGAAGCAGTGCGTTATATCAATGAAAACCTAATTGTTAACACAGATGAAC TG
GGAAGAGATTGCCGTGATTAATGCTGCTAAGACATCCATGTCTTCCAAAATCATTGGAATAAATGGTGATTTCTTT
GCTAACATGGTAGTAGATGCTGTACTTGCTATTAAATACACAGACATAAGAGGCCAGCCACGCTATCCAGTCAAC
TCTGTTAATATTTTGAAAGCCCATGGGAGAGTCAAATGGAGAGTATGCTCATCAGTGGCTATGCACTCAACTGT
GTGGTGGGATCCCAGGGCATGCCAAGAGAATCGTAAATGCAAAAATTGCTTGCCCTTGACTTCAGCCTGCAAAA
ACAAAAATGAAGCTTGGTGACAGGTGGTCATTACAGACCTGAAAAACTGGACCAAATTAGACAGAGAGAATCA
GATATCACCAGGAGAGAATTCAGAAGATCCTGGCAACTGGTGCCAATGTTATTCTAACCCTGGTGGAATTGAT
GATATGTGTCTGAAGTATTTTGTGGAGGCTGGTGCTATGGCAGTTAGAAGAGTTTTTAAAAAGGGACCTTAAACGC
ATTGCCAAAGCTTCTGGAGCAACTATTCTGTCAACCTGGCCAATTTGGAAGGTGAAGAACTTTTGAAGCTGCA
ATGTTGGGACAGGCAGAAGAAGTGGTACAGGAGAGAATTTGTGATGATGAGCTGATCTTAATCAAAAATACTAAG
GCTCGTACGTCTGCATCGATTATCTTACGTGGGGCAAATGATTTTCATGTGTGATGAGATGGAGCGCTCTTTACAT
GATGCACTTTGTGTAGTGAAGAGAGTTTTGGAGTCAAAATCTGTGGTTCCCGGTGGGGGTGCTGTAGAAGCAGCC
CTTTCCATATACCTTGAAAACTATGCAACCAGCATGGGGTCTCGGGAACAGCTTGCGATTGCAGAGTTTGCAAGA
TCACTTCTTGTTATTCCCAATACACTAGCAGTTAATGCTGCCCAGGACTCCACAGATCTGGTTGCAAAATTAAGA
GCTTTTCATAATGAGGCCCAGGTTAACCCAGAACGTAAAAATCTAAAATGGATTGGTCTTGATTTGAGCAATGGT
AAACCTCGAGACAACAAACAAGCAGGGGTGTTTGAACCAACCATAGTTAAAGTTAAGAGTTTGAAATTTGCAACA
GAAGCTGCAATCACCATTCTTCGAATTGATGATCTTATTAAATTACATCCAGAAAGTAAAGATGATAAACATGGA
AGTTATGAAGATGCTGTTCACTCTGGAGCCCTTAATGATTGATCTGATGTTCCCTTTTATTTATAACAATGTTAAA
TGCAATTGTCTTGACCTTGAGTTGAGTATTACACATTAAAGTAAAGTACAAGCTGTAACTTGGGTTTTTGTGA
TGTAGGAAATGGTTTCCATCTGTACTTTGGTCCTCTGATTTACATATTGCAACCTAGTACTTTATTAGTTTAAA
AAGAAATTGAGGTTGTTCAAAGTTTAAGCAATTCATTCTCTCTGAACACACATTGCTATTCCCATCCCACCCCA
ATGCACAGGGCTGCAACACCACGACTTCTGCCCATCTCTCCAGTGTGTGTAACAGGGTCACAAGAATTC

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FIGURE 2135

TTTGCTTTTGGCTTATTTCCGTCCATTTCCCTCTCTGCGCGCGGACCTTCCCTTTTCCAGATGGTGAGAGCCGCGGG
GACACCCGACGCCGGGGCAGGCTGATCCACGATCCTGGGTGTGCGTAACGCCGCCTGGGGCTCCGTGGGCGAGGG
ACGTGTGGGGACAGGTGCACCGGAACTGCCAGACTGGAGAGTTGAGGCATCGGAGGCGCGAGAACAGCACTACT
ACTGCGGCGAGACGAGCGCGGCGCATCCCAAAGCCCGCCAAATGCGCTCGTCCCTGGGAGGGGAGGGAGGCGCG
CCTGGAGCGGGACAGTCTTGGTCCGCGCCCTCTCCCGGGTCTGTGCCGGGACCCGGGACCCGGGAGCCGTGCG
AGGTCTCGGTCCAAGGGGCCCTTTTCTCGGAAGGGCGGCGGCCAAGAGCAGGGAAGGTGGATCTCAGGTAGCGA
GTCTGGGCTTCCGGGACGGCGGGGAGGGGAGCCGGACGGGAGGATGAGCTCCCTGGCACCAGAGAGCGCGGAAA
GAGCCTGCAGTACCGAGTGGACCACCTGCTGAGCGCCGTGGAGAATGAGCTGCAGGCGGGCAGCGAGAAGGGCGA
CCCCACAGAGCGCGAAGTGCCTGCGCTGGGCTGGAGGAGAGCGAGCTGTGGCTGCGCTTCAAGGAGCTCACCAATGA
GATGATCGTGACCAAGAAGCGGAGGAGGATGTTTCCGGTGTGAAGGTGAACGTGTCTGGCCTGGACCCCAACGC
CATGTACTCCTTCCCTGCTGGACTTCTGTGGCGGGGACAACCAACCGCTGGAAGTACGTGAACGGGGAATGGGTGCC
GGGGGGCAAGCCGAGCGCGAGGCGCCAGCTGCGTCTACATCCACCCGACTCGCCCAACTTCGGGGCCCACTG
GATGAAGGCTCCCGTCTCCTTCAGCAAAGTCAAGCTCACCAACAAGCTCAACGGAGGGGGCCAGATCATGCTGAA
CTCCTTGCCATAAGTATGAGCCTCGAATCCACATAGTGAGAGTTGGGGGTCCACAGCGCATGATCACCAGCCACTG
CTTCCCTGAGACCCAGTTCATAGCGGTGACTGCTTATCAGAACGAGGAGATCACAGCTCTTAAATTAAGTACAA
TCCATTTGCAAAGCTTTTCTTGATGCAAAGGAAAGAAGTGATCACAAAGAGATGATGGAGGAACCCGGAGACAG
CCAGCAACCTGGGTACTCCCAATGGGGGTGGCTTCTTCTGGAAACCAGCACCTGTGTCCACCTGCAAAATCCTCA
TCTCAGTTTGGAGGTGCCCTCTCCCTCCCTCCACGCACAGCTGTGACAGGTACCCAACCTGAGGAGCCACCG
GTCTCTACCCCTACCCAGCCCTATGCTCATCGGAACAATTCTCCAACCTATTCTGACAACCTACCTGCATGTTT
ATCCATGCTGCAATCCCATGACAATTGGTCCAGCCTTGGAATGCCGTGCCATCCAGCATGCTCCCCGTGAGCCA
CAATGCCAGCCACCTACCAGCTCCAGTACAGTACCCAGCCTGTGGTCTGTGAGCAACGGCGCCGTACCCCGGG
CTCCCAGGCAGCAGCCGTGTCCAACGGGCTGGGGGCCAGTCTTCCGGGGCTCCCCGCGCACTACACACCCCT
CACCCATCCGGTCTCGGCGCCCTCTTCTCGGGATCCCACTGTACGAAGGGCGGCCGCGCCACAGACATCGT
GGACAGCCAGTACGACGCCGAGCCCAAGGCCGCTCATAGCCTCATGGACACCTGTGTGCGCCACCTTCCATGTTG
AAGCAGCAAGGCCAGGTCCCGAAAGATGCAGTGACTTTTTGTCTGTGGCAGCCAGTGGTGACTGGATTGACCTAC
TAGGTACCCAGTGGCAGTCTCAGGTAAAGAAGGAAATGCAGCCTCAGTAACCTTCTTTTCAAAGCAGTGGAGGAG
CACACGGCACCTTTCCCGAGAGCCCCAGCATCCCTTGCTCACACCTGCAGTAGCGGTGCTGTCCAGGTGGCTTA
CAGATGAACCCAACTGTGGAGATGATGCAGTTGGCCCAACCTCACTGACGGTGAAAAATGTTTGCCAGGGTCCA
GAACTTTTTTTGGTTTTATTTCTCATACAGTGATTGGCAACTTTGGCACACCAGAATTTGTAACTCCACCAGT
CCTACTTTTAGTGAGATAAAAAGCACACTCTTAATCTTCTTCTTCTTGTGCTTTCAAGTAGTTAGAGTTGAGCTGTT
AAGGACAGAATAAAATCATAGTTGAGGACAGCAGTTTTAGTTGAATTGAAATTTGACTGCTCTGCCCCCTAGA
ATGTGTGATTTTAAAGCATATGTAGCTAATCTCTTGTGTTGTTAACTATAACTGTTTCATATTTTCTTTTGAC
AAAGTAGCCAAAGACAATCAGCAGAAAGCATTTTCTGCAAAATAAACGCAATATGCAAAATGTGATTCGTCCAGT
TATTAGTGAAGCCCTCCTTTTGTGAGTATTTACTGTTTATTG

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FIGURE 2136

MSSPGTESAGKSLQYRVDHLLSAVENELQAGSEKGDPTERELRVGLEESELWLRFKELTNEMIVTKNGRRMFVVL
KVNVSGLDPNAMYSFLLDFVAADNHRWKYVNGEWVPGGKPEPQAPSCVYIHPDSPNFGAHWMKAPVSFSKVKLTN
KLNGGGQIMLNSLHKYEPRIHIVRVGGPQRMITSHCFPETQFIAVTAYQNEEIITALKIKYNPFKAFLDAKERSD
HKEMMEEPGDSQQPGYSQGWLLPGTSTLCPPANPHPQFGGALSIPSTHSCDRYPTLRSHRSPYPSPYAHNRNS
PTYSDNSPACLSMLQSHDNWSSLGMPAHPSMLPVSHNASPPTSSSQYPSLWSVSNGAVTPGSQAAAVSNGLGAQF
FRGSPAHTPLTHPVSAPSSSGSPLYEGAAAATDIVDSQYDAAAQGRLIASWTPVSPPSM

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FIGURE 2137

CGCAGCCGTGCGATGTTGTCTCTACAGCCATGTATTTCGGCTCCTGGCAGAGACTTGGGGATGGAACCGCACAGA
GCCGCGGGCCCTTTGCAGCTGCGATTTTCGCCCTACGTTTTCAACGGAGGTACTATACTGGCAATTGCTGGAGAA
GATTTTGCAATTGTTGCTTCTGATACTCGATTGAGTGAAGGGTTTTCAATTCATACGCGGGATAGCCCCAAATGT
TACAAATTAACAGACAAAACAGTCATTGGATGCAGCGGTTTTTCATGGAGACTGTCTTACGCTGACAAAGATTATT
GAAGCAAGACTAAAGATGTATAAGCATTCCAATAATAAGGCCATGACTACGGGGGCAATTGCTGCAATGCTGTCT
ACAATCCTGTATTCAAGGCGCTTCTTTCCATACTATGTTTACAACATCATCGGTGGACTTGATGAAGAAGGAAAG
GGGGCTGTATACAGCTTTGATCCAGTAGGGTCTTACCAGAGAGACTCCTTCAAGGCTGGAGGCTCAGCAAGTGCC
ATGCTACAGCCCCTGCTTGACAACCAGGTTGGTTTTAAGAACATGCAGAATGTGGAGCATGTTCCGCTGTCCTTG
GACAGAGCCATGCGGCTGGTGAAAGATGTCTTCATTTCTGCGGCTGAGAGAGATGTGTACACTGGGGACGCACTC
CGGATCTGCATAGTGACCAAAGAGGGCATCAGGGAGGAACTGTTTCCTTAAGGAAGGACTGATCTGTGTGCTCT
TATCACCAATCAGTTCAGACCTGGTTGATTTTGTACTTTGGAAGTGTACCTTGGATGGTTTTGTTTATTAATA

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FIGURE 2138

MLSSTAMYSAPGRDLGMEPHRAAGPLQLRFSPYVFNGGTILAIAGEDFAIVASDTRLSEGFSIHTRDSPKCYKLT
DKTVIGCSGFHGDCLTLTKIIEARLKMYKHSNNKAMTTGAIAAMLSTILYSRRFFPYVYNIIGGLDEEGKGAVY
SFDPVGSYQRDSFKAGGSASAMLQPLLDNQVGFKNMQNVEHVPLSLDRAMRLVKDVFISAAERDVYTGDALRICI
VTKEGIREETVSLRKD

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FIGURE 2139

GCTCCAGCCGGGCCCCCTCAGCGGTGCGCGGGACGGCTCCCGGCTGCAGTCTGCCCGCCCCGCCCGCGGGGGG
CGAGTCGCGAAGCGCGCCTGCGACCCGGCGTCCGGGCGCGCTGGAGAGGACGCGAGGAGCCATGAGGCGCCAGCC
TGCGAAGGTGGCGGCGCTGCTGCTCGGGCTGCTCTTGGAGTGCACAGAAGCCAAAAGCATTGCTGGTATTTCGA
AGGACTCTATCCAACCTATTATATATGCGCTCCTACGAGGACTGCTGTGGCTCCAGGTGCTGTGTGCGGGCCCT
CTCCATACAGTGGCTGTGGTACTTCTGGTTCCCTTCTGATGATGGGCGTGCTTTTCTGCTGCGGAGCCGGCTTCTT
CATCCGGAGGCGCATGTACCCCCCGCGCTGATCGAGGAGCCAGCCTTCAATGTGTCTACACCAGGCAGCCCCC
AAATCCCGGGCCAGGAGCCAGCAGCCGGGGCCACCCTATTACACCGACCCAGGAGGACCGGGGATGAACCTGT
CGGGAATTCCATGGCAATGGCTTTCCAGGTCCCACCCAACTCACCCAGGGGAGTGTGGCCTGCCCGCCCCCTCC
AGCCTACTGCAACACGCCTCCGCCCCCGTACGAACAGGTAGTGAAGGCCAAGTAGTGGGGTGCCACGTGCAAGA
GGAGAGACAGGAGAGGGCCCTTTCCCTGGCCTTCTGTCTTCGTTGATGTTCACTTCCAGGAACGGTCTCGTGGGC
TGCTAAGGGCAGTTCCCTCTGATATCCTCACAGCAAGCACAGCTCTCTTTCAGGCTTTCATGGAGTACAATATAT
GAACTCACACTTTGTCTCCTCTGTTGCTTCTGTTCTGACGCAGTCTGTGCTCTCACATGGTAGTGTGGTGACAG
TCCCCGAGGGCTGACGTCTTACGGTGGCGTGACCAGATCTACAGGAGAGAGACTGAGAGGAAGAAGGCAGTGCT
GGAGGTGCAGGTGGCATGTAGAGGGGCCAGGCCGAGCATCCCAGGCAAGCATCCTTCTGCCCGGGTATTAATAGG
AAGCCCCACGCCGGGCGGCTCAGCCGATGAAGCAGCAGCCGACTGAGCTGAGCCAGCAGGTCTGCTCCAGC
CTGTCTCTCGTCAGCCTTCCCTCTTCCAGAAGCTGTTGGAGAGACATTCAGGAGAGAGCAAGCCCCCTGTCAATG
TTCTGTCTCTGTTTCATATCCTAAAGATAGACTTCTCCTGCACCGCCAGGGAAGGGTAGCACGTGCAGCTCTCACC
GCAGGATGGGGCCTAGAATCAGGCTTGCCCTTGGAGGCCGTGACAGTGATCTGACATCCACTAAGCAAATTTATTTA
AATTCATGGGAAATCACTTCCCTGCCCAAACCTGAGACATTGCATTTTGTGAGCTCTGGTCTGATTTGGAGAAAG
GACTGTTACCCATTTTTTGGTGTGTTTATGGAAGTGCATGTAGAGCATCCTGCCCTTTGAAATCAGACTGGGTGT
GTGTCTTCCCTGGACATCACTGCCTCTCCAGGTCACTCTCAGGCCCGGGGTCTCCTTCCCTCAGGCAGCTCCAG
TGGTGGGTTCTGAAGGGTGCTTTCAAACAGGGGGCACATCTGGCTGGGAAGTCACATGGACTCTTCCAGGGAGA
GAGACCAGCTGAGGCGTCTCTCTCTGAGGTTGTGTTGGGTCTAAGCGGGTGTGTGCTGGGCTCCAAGGAGGAGGA
GCTTGCTGGGAAAAGACAGGAGAAGTACTGACTCAACTGCACTGACCATGTTGTGTCATAATTAGAATAAAGAA
GTGGTTGGAAATGCACATTCTTGATAGGAATCACAGCTCACCCAGGATCTCACAGGTAGTCTCCTGAGTAGTT
GACGGCTAGCGGGGAGCTAGTTCCGCCGCATAGTTATAGTGTGATGTGTGAACGCTGACCTGTCTGTGTGCTA
AGAGCTATGCAGCTTAGCTGAGGCGCTAGATTACTAGATGTGCTGTATCACGGGGAATGAGGTGGGGGTGCTTA
TTTTTTAATGAACATAACAGAGACTCTTGAGAAATTGTTACTCATTGAACCTGGAGCATCAAGACATCTCATGGAA
ATGGATACGGAGTGATTTGGTGTCCATGCTTTTCACTCTGAGGACATTTAATCGGAGAACCCTCCTGGGGAATTTT
GTGGGAGACACTTGGGAACAAACAGACACCCTGGGAATGCAGTTGCAAGCACAGATGCTGCCACCAGTGTCTCT
GACCACCCTGGTGTGACTGCTGACTGCCAGCGTGGTACCTCCCATGCTGCAGGCCTCCATCTAAATGAGACAACA
AAGCACAATGTTCACTGTTTACAACCAAGACAACCTGCGTGGGTCCAAACACTCCTCTTCCCTCCAGGTCAATTTGTT
TTGCATTTTTTAATGTCTTTATTTTTTTGTAATGAAAAAGCACACTAAGCTGCCCTGGAATCGGGTGCAGCTGAAT
AGGCACCCAAAAGTCCGTGACTAAATTTTCGTTTGTCTTTTTGATAGCAAATAATGTTAAGAGACAGTGATGGCTA
GGGCTCAACAATTTTGATTCCCATGTTTGTGTGAGACAGAGTTTGTTCCTTGAACCTGGTTAGAAATTGTGC
TACTGTGAACGCTGATCCTGCATATGGAAGTCCCACTTCGGTGACATTTCCCTGGCCATTCTGTTCATTGTGT
GGATGGTGGGTTGTGCCACTTCCCTGGAGTGAGACAGCTCCTGGTGTGTAGAATCCCGGAGCGTCTGTGGTTCA
GAGTAACTTGAAGCAGATCTCTGCATGCTTTTCTCTGCAACAATTGGCTCATTTCTCTTTTTTGTCTCTTTT
GATAGGATCCTGTTTCTATGTGTGCAAAATAAAAATAAATTTGGGCAA

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FIGURE 2140

ATGGCAGGGGAGTCACAAAGGAGAAGCACTCAGCCTGCCGAGAGGTCCCAGGACTTTCCTGGAGGATCAGTCCCC
AAACTGACTGTGACAGGGAGCTATACCCAGATAACAGCAGAGGCCCAGAATAAGAAAGAGTCTGTAGATGGCAAG
TCAATGGGAAATCATTCCAGGAAGGTAGGGAAAGATGGAATTCTGGAGAGCATTGGACCTCAGATTGGGAGTCTG
AACGTCTTTCCATATGCATCAGGAAGCCATGGAAAATTCACAGACTGGAGTGACTTTGGCAAAGGAACAACATAT
AACGCACTCTCCCCTGAACTCTACACAACATATTTGTCACCAAGACCCTACTTCTGACCTCCCTGTTCTTATGC
ATTGGAACAGCATACCCCCGATTCCGCTACGACCAACTCATACACCTCCTATGA

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FIGURE 2141

CTAAATACTACCGTATGACCCACCATAATTACCCCCATACTCCTTACACTATTCCCTCATCACCCAACTAAAAATA
TTAAATACAAATTACCACCTACCTCCCTCACCAAAGCCCATAAAAAATAAAAACTATAACAAACCCTGAGAACCA
AAATGAACGAAAATCTGTTCACTTCATTCAATTGCCCCACAATCCTAGGCCTACCCGCCGCGAGTACTGATCATT
TATTTCCCCCTCTATTGATCCCCACCTCCAAATATCTCATCAACAACCGACTAATTACCACCCAACAATGACTAA
TCCAATAACCTCAAAACAAATGATAGCCATACACAACACTAAGGGACGAACCTGATCTCTTATACTAGTATCCT
TAATCATTTTTATTGCCACAATAACCTCCTCGGACTCCTGCCTCACTCATTTACACCAACCACCCAACCTATCTA
TAAACCTAGCCATGGCCATCCCCCTTATGAGCGGGCGCAGTGATTATAGGCTTTTCGCTCTAAGATTAAAAATGCCC
TAGCCCACTTCTTACCACAAGGCACACCTACACCCCTTATCCCTATACTAGTTATTATCGAAACCATCAGCCTAC
TCATTCAACCAATAGCCCTGGCCGTACGCCTAACCGCTAACATTACTGCAGGCCACCTACTCATGCACCTAATTG
GAAGCGCCACACTAGCAATATCAACTATTAACCTTCCCTCTACACTTATCATCTTCACAATTCTAATTCTACTGA
CTATCCTAGAAATCGCTGTGCGCTTAATCCAAGCCTACGTTTTTACACTTCTAGTAAGCCTCTACCTGCACGACA
ACACATAATGACCCACCAATCACATGCCTATCATATAGTAAACCCAGCCCATGGCCCCTAACAGGGGCCCTCTC
AGCCCTCCTAATGACCTCCGGCCTAGCCATGTGATTTCACTTCCACTCCACAACCCCTCCTCATACTAGGCCTACT
AACCAACACACTAACCATATACCAATGATGGCGCGATGTAACACGAGAAAGCACATACCAAGGCCACCACACACC
ACCTGTCCAGAAAGGCCTTCGATACGGGATAATCCTATTTATTACCTCAGAAGTTTTTTCTTCGCAGGATTTTT
CTGAGCCTTTTACCCTCCAGCCTAGCTCCACCCCCCACTAGGGGGACACTGGCCCCCAACAGGEATCACCCC
GCTAAATCCCCTAGAAGTCCCACTCCTAAACACATCCGTATTACTCGCATCAGGGGTATCAATCACCTGAGCTCA
CCATAGTCTAATAGTCTATTTTACCCTCCTACAAGCCTCAGAGTACTTCGAG

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FIGURE 2142

GTGGGAACATCCAGTTGCGGGAAAACAAGCTTAACACGCCCCTGATTCTACATTATGCTCCTACCTCCCGGCAG
CCTCTCCAGGCCCAGAACTTTCTCCAGTCAGCCTCTACAGACCAAGCTCATGACTCACAATGGCCTATTTAGGCC
CATACCCTACGTACGGCAGCCTCCGCAGATGAGCCTACTGCCTCACAACAGCCTCCACAGGCACAGCTCCATCG
TTACAATGGCCTCTTTAGACCCAGCTCCTGCCTCCCAGCCTTCTCTCCAGGCCCTGAACTTTCTCAAGTCGACCT
CACCAGGCCCAGCTCATGCTTCTTTGCAGCCTCTCCAGGCCCAGCTCCTGCATCTTGGTGGCCCCTCCAGGCCCA
GCCTCTGCCTCCCCTCAGCCTCTACAGTCCCAACGTCTGCCTCACAGCAGATTCTTCAGGCCCAGCATCTGCCTC
ACTTGGACCTCCAGACCCAGATGGTGTCTCACTGTGGCATCCTCAGGCGAAGCTCCTGCCTTTTCGGCAGCCTCT
CCAGGCCCAGCTCCTCCTGCCTCCCAGTGGCCTCTTTTCGGCCCAGCCCAGCTCATGCCTCCCGGCGGCCTTCCCA
AGCCCCGCTTTTGACTTTCGGTGGCCTCTGCAGGCCTCGACAAGGCCAGCCTCCTGCCTCCCGAAGGCCTGCAC
AGGCCAGCCTCTGCCTCACAGCGGACTCTC

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FIGURE 2143

MLLPGSLSRPRTFSSQPLQTKLMTHNGLFRPIPYLTAVSADEPTASQQPPQAQLHRYNGLFRPSSCLPAFSPGP
ELSQVDLTRPSSCFFAASPGPTPASWWPLQAQVPPVGLYNPNICLTADSSRPASASQWTLQTQMVSHCGILRRS
SCLSAASPGPAPPASQWPLSAQPSSCLPAAFPSPAFFDFWWPLQASTRPSLLPPEGLHRPSLCLTADSPRPASSRL
TAASPVQSSCLSATSAGPATACQWPL

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FIGURE 2144

CTCTCTCACACACACCCCCGCTTGGGCCTCCTCTCTCTCTCCGGCTCCATTTTCTCCGCCGCCGGGGGCCGGGGT
CTCCTGTGGGGGGGCCAGCCGGTATCCCAGGTCTCCCTTCAGTGCCGGGGTGAACCCCCGGGGGAGCCGGGAGCC
GGGGGCAGACGGGCGGGGGTTGGGGCGGAGGGAGCAGCGGCCCCAGCGAGTTTGGGGGGAGAAGTAACCAGGCGG
GGGGAGGGGGCGGAGCAGGGAGGGGGCCTCAGGGCCCCCCCCCAGCTATGGACGAACGGCTACTGGGGCCGCCCCC
TCCAGGCGGGGGGCCGGGGGGGCTGGGATTGGTGAGTGGGGAGCCTGGGGGCCCTGGCGAGCCTCCCGGTGGCGG
AGACCCCGGTGGGGGTAGCGGGGGGGTCCCGGGAGGCCGAGGGAAGCAAGACATCGGGGACATTCTGCAGCAGAT
AATGACCATCACCGACCAGAGCCTGGACGAGGCCCAGGCCAAGAAAACACGCCCTAAACTGCCACCGAATGAAGCC
TGCTCTCTTTAGCGTCCTGTGTGAAATCAAGGAGAAAAGTGGCCTCAGCATTCGGAGCTCCCAGGAGGAGGAGCC
GGTGGACCCACAGCTGATGCGCTTGGACAACATGCTTCTGGCAGAGGGTGTGGCTGGGGCCGAGAAAGGGGGCGG
CTCAGCAGCAGCAGCTGCAGCCGCTGCAGCCTCTGGTGGTGGTGTGTCCCTGACAACTCCATCGAACACTCGGA
CTATCGCAGCAAACCTTGCCAGATCCGTACATATACCACTCGGAGCTGGAGAAGTATGAGCAGGCATGTAATGA
GTTACAGACCCATGTCATGAACCTGCTGAGGGAGCAGAGCCGCACCAGGCCCGTGGCCCCAAAGAGATGGAACG
CATGGTGAGCATCATCCATCGAAAGTTCAGCGCCATCCAGATGCAGCTGAAGCAGAGCACCTGCGAGGCTGTGAT
GATCCTGCGCTCCCGTTTCCTGGATGCCAGACGAAAGCGCCGTAACCTCAGCAAACAGGCCACTGAGGTCCATAAA
TGAGTATTTCTACTCCCACCTGAGTAACCCATATCCTAGTGAGGAGGCCAAGGAGGAGCTTGCCAAGAAGTGTGG
CATCACCGTGTCTCAGGTCTCCAACCTGGTTTGGCAACAAGAGGATTGCTATAAGAAAAACATCGGAAAGTTCCA
AGAGGAGGCAAACATCTATGCTGTCAAGACCGCCGTGTGAGTCACCCAGGGGGGCCACAGCCGCACCAGCTCCCC
GACACCCCTTCTCTGCAGGTGGATCCCAGTGTACCCAGCTGACTGTTTTGCACACTTCTTGCTTTTGTTC
CACTTCTATCTAGGCAGGATCATAGCAGAGAGGGGGCCTTTTGGGGTGAGAGGGACCGAGCTGAGATAGGCTGG
AGATGTCAGGGGACAGAGGCCATTCCAGTGATCTTAGTTCTGCCTTTCTTCCACGGGTGGCCAAGGAACAGCCT
GCTCTTTCTGTGTGTTGGAATGTTATTTTGTGGATAATTGGAGTATAGTAGCATGTCCCCAC

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FIGURE 2145

GAGTAGAGTAGGGCAGGAGAACTGGGCCAGGCTGCACTTAGCTCAAGGGGCCTCGAGGACTCTCTGCGTCTCTG
GAGACAAGGGCACTACACGCACCTCAGAATGAAGAGTTGCGGGAGCATGCTGGGGCTCTGGGGGCAGCGGCTCCC
CGCGGCGTGGGTCTGCTTCTGTTGCCCTTTCCTGCCGCTGCTGCTGCTTGACGCCCCGCGCCCCACCGCGAGTC
CTACAAGCCGGTCATCGTGGTGACATGGGCTCTTCGACAGCTCGTACAGCTTCCGCCACCTGCTGGAATACATCAA
TGAGACACACCCCGGGACTGTGGTGACAGTGCTCGATCTCTTCGATGGGAGAGAGAGCTTGCGACCCCTGTGGGA
ACAGGTGCAAGGGTTCCGAGAGGCTGTGGTCCCCATCATGGCAAAGGCCCTCAAGGGGTGCATCTCATCTGCTA
CTCGCAGGGGGGCCTTGTGTGCCGGGCTCTGCTTCTGTCATGGATGATCACAACTGGATTCTTTTCATCTCCCT
CTCCTCTCCACAGATGGGACAGTATGGAGACACGGACTACTTGAAGTGGCTGTTCCCCACCTCCATGCGGTCTAA
CCTCTATCGGATCTGCTATAGCCCCCTGGGGCCAGGAATTCTCCATCTGCAACTACTGGCATGATCCCCACCACGA
TGACTTGTACCTCAATGCCAGCAGCTTCCCTGGCCCTGATCAATGGGGAAAGAGACCATCCCAATGCCACAGTATG
GCGGAAGAAGCTTTCTGCGTGTGGGCCACCTGGTGCTGATTGGGGGCCCTGATGATGGTGTATTACTCCCTGGCA
GTCCAGCTTCTTTGGTTTCTATGATGCAAATGAGACCGTCTGGAGATGGAGGAGCAACTGGTTTATCTGCGGGA
TTCTTTTGGGTTGAAGACTCTATTGGCCCCGGGGGCCATAGTGAGGTGTCCAATGGCCGGTATCTCCCACACAGC
CTGGCACTCCAACCGTACCCCTTTATGAGACCTGCATTGAACCTTGGCTCTCCTGAGGATATATTCAGGGGTCCCC
AGGAACCTCTCGGTCCAGAGACCAAGTGGTGGCCTTGGAAGCAGATGTCAGGCTTGGTGTGCCTGTGACCACC
TCATTGCTCCCATATTATCCCCATTTTTAGTAGAGACGGGGTTTTAGTAGAGACTTGGCCTCCCAGAACCCCT
TCCTCTGCTCCTCCATGAATGACAATTCCAGGCCTCCCCACCTCATGTCCTCTCATTGGGGGATTGCTCCGTG
CTGTCCCTTTCTCTCAAGGCCGAAGTTGGGAAGTGAGAAACCATGTTTTTAACCTTGTGGCTGCTTTTGCTGCTGC
TGCTCCTCCGTATCTGGCTGTATGGGTGGAGAACCCACCCCTGCCACCACAGGGGTCTCCTCCAGGCCACTC
AGGACATTTTTAGCTTCTCTCCTCCCCATGTTCCCTTTTTCTCTAAAGTCCCCTGACATCAGCCCTCCCACTC
CTAAGAGGGACTACCCATGAGAGTGGGGTTCTGAGGCTCCCTATGGGGACAGTTCCGTTCTTGAAGTGTGAGT
TTGGGGAATATCTGTGGCCTATGAGGCCATCTCAGGTTTGGGGATCCCCAGTCCCTATGATCAGTGTGGAGT
ACCCCTTGGGAGAGCCTAGTTTCTTTGAGGCCCCAGGCCCTCTTTTAACCTTTGAATAGGTGTATCCCTG
TATTTATGGAATAAAGTTCCATTTCTC

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FIGURE 2146A

AGAAGGTAGCAGACAGACAGACGGATCTAACCTCTCTTGGATCCTCCAGCCATGAGGCTGCTCTGGGGGCTGATC
TGGGCATCCAGCTTCTTCACCTTATCTCTGCAGAACCCAGGTTGCTCTTGTCTCTCCTTCTGTGGTTTCATCTG
GGGGTCCCCCTATCGGTGGGGGTGCAGCTCCAGGATGTGCCCCGAGGACAGGTAGTGAAAGGATCAGTGTTCTCTG
AGAAACCCATCTCGTAATAATGTCCCCTGCTCCCCAAAGGTGGACTTCACCTTAGCTCAGAAAGAGACTTCGCA
CTCCTCAGTCTCCAGGTGCCCTTGAAAGATGCGAAGAGCTGTGGCCTCCATCAACTCCTCAGAGGCCCTGAGGTC
CAGCTGGTGGCCCATTCGCCATGGCTAAAGGACTCTCTGTCCAGAACGACAAACATCCAGGGTATCAACCTGCTC
TTCTCCTCTCGCCGGGGGCACCTCTTTTGCAGACGGACCAGCCCATTTACAACCTGGCCAGCGGGTTTCGGTAC
CGGGTCTTTGCTCTGGATCAGAAGATGCGCCCGAGCACTGACACCATCACAGTCATGGTGGAGAACTCTCACGGC
CTCCGCGTGCAGGAAGAAGGAGGTGTACATGCCCTCGTCCATCTTCCAGGATGACTTTGTGATCCAGACATCTCA
GAGCCAGGGACCTGGAAGATCTCAGCCCGATTCTCAGATGGCCTGGAATCCAACAGCAGCACCCAGTTTGAGGTG
AAGAAATATGTCCTTCCCAACTTTGAGGTGAAGATCACCCCTGGAAAGCCCTACATCCTGACGGTGCCAGGCCAT
CTTGATGAAATGCAGTTAGACATCCAGGCCAGGTACATCTATGGGAAGCCAGTGCAGGGGGTGGCATATGTGCGC
TTTGGGCTCCTAGATGAGGATGGTAAGAAGACTTTCTTTCGGGGGCTGGAGAGTCAGACCAAGCTGGTGAATGGA
CAGAGCCACATTTCCCTCTCAAAGGCAGAGTTCCAGGACGCCCTGGAGAAGCTGAATATGGGCATTACTGACCTC
CAGGGGCTGCGCCTCTACGTTGCTGCAGCCATCATTGAGTCTCCAGGTGGGAGATGGAGGAGGCAGAGCTCACA
TCCTGGTATTTTGTGTCATCTCCCTTCTCCTTGGATCTTAGCAAGACCAAGCGACACCTTGTGCCTGGGGCCCCC
TTCTGCTGCAGGCCTTGGTCCGTGAGATGTGAGGCTCCCCAGCTTCTGGCATTCTGTCAAAGTTTCTGCCACG
GTGTCTTCTCCTGGGTCTGTTCTGAAGTCCAGGACATTCAGCAAAACACAGACGGGAGCGCCAAAGTCAGCATT
CCAATAATTATCCCTCAGACCATCTCAGAGCTGCAGCTCTCAGTATCTGCAGGCTCCCCACATCCAGCGATAGCC
AGGCTCACTGTGGCAGCCCCACCTTCAGGAGGCCCGGGTTTCTGTCTATTGAGCGGCCGGATTCTCGACCTCCT
CGTGTGGGGACACTCTGAACCTGAACCTTGCAGCCGTGGGCGATGGGGCCACCTTTTCTCATTACTACTACATG
ATCCTATCCCGAGGGCAGATCGTGTTTCATGAATCGAGAGCCCAAGAGGACCCTGACCTCGGTCTCGGTGTTTGTG
GACCATCACCTGGCACCTCCTTCTACTTTGTGGCCTTCTACTACCATGGAGACCACCCAGTGGCCAACTCCCTG
CGAGTGGATGTCCAGGCTGGGGCCTGCGAGGGCAAGCTGGAGCTCAGCGTGGACGGTGCCAAAGCAGTACCGGAAC
GGGGAGTCCGTGAAGCTCCACTTAGAAACCGACTCCCTAGCCCTGGTGGCGCTGGGAGCCTTGGACACAGCTCTG
TATGCTGCAGGCAGCAAGTCCCAAGCCCCCTCAACATGGGCAAGGTCTTTGAAGCTATGAACAGCTATGACCTC
GGCTGTGGTCTTGGGGGTGGGGACAGTGCCCTTCAGGTGTTCCAGGCAGCGGGCCTGGCCTTTTCTGATGGAGAC
CAGTGGACCTTATCCAGAAAGAGACTAAGCTGTCCCAAGGAGAAGACAACCCGAAAAAGAGAAACGTGAACCTC
CAAAAGGCGATTAAATGAGAAATTGGGTGAGTATGCTTCCCCGACAGCCAAGCGCTGCTGCCAGGATGGGGTGACA
CGTCTGCCCATGATGCGTTTCTGCGAGCAGCGGGCAGCCCGCTGCAGCAGCCGGACTGCCGGGAGCCCTTCTCTG
TCCTGCTGCCAATTGTCTGAGAGTCTGCGCAAGAAGAGCAGGGACAAGGGCCAGGCGGGCTCCAACGAGCCCTG
GAGTCTGTCAGAGGAGGAGGACCTGATTGATGAGGATGACATTCCCGTGCAGCTTCTTCCAGAGAACTGGCTC
TGGAGAGTGGAACAGTGGACCGCTTTCAAATATTGACACTGTGGCTCCCCGACTCTCTGACCAGTGGGAGATC
CATGGCCTGAGCCTGTCCAAAACCAAAGGCCTATGTGTGGCCACCCAGTCCAGCTCCGGGTGTTCCGCGAGTTT
CACCTGCACCTCCGCCTGCCCATGTCTGTCCGCCGCTTTGAGCAGCTGGAGCTGCGGCCTGTCTCTATAACTAC
CTGGATAAAAACTGACTGTGAGCGTCCACGTGTCCCGAGTGGAGGGGCTGTGCCTGGCTGGGGGCGGAGGGCTG
GCCAGCAGGTGCTGGTGCCTGCGGGCTCTGCCCGCCTGTTGCCTTCTCTGTGGTGGCCACGGCAGCCACCGCT
GTGTCTCTGAAGGTGGTGGCTCGAGGGTCTTCCGAATTCCTGTGGGAGATGCGGTGTCCAAGGTTCTGCAGATT
GAGAAGGAAGGGGCCATCCATAGAGAGGAGCTGGTCTATGAACCAACCCCTTGGACCACCGAGGCCGGACCTTG
GAAATACCTGGCAACTCTGATCCCAATATGATCCCTGATGGGGACTTTAACAGCTACGTAGGGTTACAGCCTCA
GATCCATTGGACACTTTAGGCTCTGAGGGGGCCTTGTACCAGGAGGCGTGGCCTCCCTCTTGAGGCTTCTCTCGA
GGCTGTGGGGAGCAAACCATGATCTACTTGGCTCCGACACTGGCTGTCTCCCGCTACCTGGACAAGACAGAGCAG
TGGAGCACACTGCCTCCCGAGACCAAGGACCAGCCGTGGATCTGATCCAGAAAGGCTACATGCGGATCCAGCAG
TTTCGGAAGGCGGATGGTTCTATGCGGCTTGGTTGTACGGGGCAGCAGCACCTGGCTCACAGCCTTTGTGTTG
AAGGTCTGAGTTTGGCCAGGAGCAGGTAGGAGGCTCGCCTGAGAACTGCAGGAGACATCTAACTGGCTTCTG
TCCAGCAGCAGGCTGACGGCTCGTTCCAGGACCTCTCTCCAGTGATACATAGGAGCATGCAGGGGGGTTTGGTG
GGCAATGATGAGACTGTGGCACTCACAGCCTTGTGACCATCGCCCTTCATCATGGGCTGGCCGTCTTCCAGGAT
GAGGGTGCAGAGCCATTGAAGCAGAGAGTGAAGCCTCCATCTCAAAGGCAAGCTCATTTTTTGGGGGAGAAAGCA

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FIGURE 2146B

AGTGCTGGGCTCCTGGGTGCCCACGCAGCTGCCATCACGGCCTATGCCCTGACACTGACCAAGGCCCTGCGGAC
CTGCGGGGTGTTGCCACAACAACCTCATGGCAATGGCCCAGGAGACTGGAGATAACCTGTACTGGGGCTCAGTC
ACTGGTTCTCAGAGCAATGCCGTGTCGCCCCACCCGGCTCCTCGCAACCCATCCGACCCCATGCCCCAGGCCCA
GCCCTGTGGATTGAAACCACAGCCTACGCCCTGCTGCACCTCCTGCTTCACGAGGGCAAAGCAGAGATGGCAGAC
CAGGCTGCGGCCCTGGCTCACCCGTCAAGGGGAGCTTCCAAGGGGGATTCCGCAGTACCCAAGACACGGTGATTGCC
CTGGATGCCCTGTCTGCCTACTGGATTGCCCTCCACACCACTGAGGAGAGGGGTCTCAATGTGACTCTCAGCTCC
ACAGGCCGGAATGGGTTCAGTCCCACGCGCTGCAGCTGAACAACCGCCAGATTTCGCGGCCCTGGAGGAGGAGCTG
CAGTTTTCTTGGGCAGCAAGATCAATGTGAAGGTGGGAGGAAACAGCAAAGGAACCCCTGAAGGTCTTCGTACC
TACAATGTCTGGACATGAAGAACACGACCTGCCAGGACCTACAGATAGAAGTGACAGTCAAAGGCCACGTGAG
TACACGATGGAAGCAAACGAGGACTATGAGGACTATGAGTACGATGAGCTTCCAGCCAAGGATGACCCAGATGCC
CCTCTGCAGCCCGTGACACCCCTGCAGCTGTTTGGGGTCGGAGGAACCGCCGAGGAGGGAGGCGCCCAAGGTG
GTGGAGGAGCAGGAGTCCAGGGTGCACTACACCGTGTGCATCTGGCGGAACGGCAAGGTGGGGCTGTCTGGCATG
GCCATCGCGGACGTCACCCCTCCTGAGTGGATTCCACGCCCTGCGTGCTGACCTGGAGAAGCTGACCTCCCTCTCT
GACCGTTACGTGAGTCACTTTGAGACCGAGGGGCCCCACGTCCTGCTGTATTTTGA CTGGTCCCCACCTCCCGG
GAGTGCGTGGGCTTTGAGGCTGTGCAGGAAGTGCCGGTGGGGCTGGTGACCGGCCAGCGCAACCCCTGTACGAC
TACTACAACCCCGAGCGCAGATGTTCTGTGTTTACGGGGCACCAAGTAAGAGCAGACTCTTGGCCACCTTGTT
TCTGCTGAAGTCTGCCAGTGTGCTGAGGGGAAGTGCCCTCGCCAGCGTCGCGCCCTGGAGCGGGGTCTGCAGGAC
GAGGATGGCTACAGGATGAAGTTTGCCTGCTACTACCCCGTGTGGAGTACGGCTTCCAGGTTAAGGTTCTCCGA
GAAGACAGCAGAGCTGCTTTCCGCCTCTTTGAGACCAAGATCACCCAAGTCCTGCACCTTACCAAGGATGTCAAG
GCCGCTGCTAATCAGATGCGCAACTTCCTGGTTCGAGCCTCCTGCCGCTTTCGCTTGGAACTGGGAAAGAATAT
TTGATCATGGGTCTGGATGGGGCCACCTATGACCTCGAGGGACACCCCAAGTACCTGCTGGACTCGAATAGCTGG
ATCGAGGAGATGCCCTCTGAACGCTGTGCCGAGCACCCGCCAGCGGCAGCCTGTGCCAGCTCAACGACTTC
CTCCAGGAGTATGGCACTCAGGGGTGCCAGGTGTGAGGGCTGCCCTCCACCTCCGCTGGGAGGAACCTGAACCT
GGGAACCATGAAGCTGGAAGCACTGCTGTGTCCGCTTTCATGAACACAGCCTGGGACCAGGGCATATTAAAGGCT
TTTGGCAGCAAAGTGTGCTGTTGGC

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FIGURE 2147

TGTGGCCACCCAGTTCAGCTCCGGGTGTTCCGCGAGTTCCACCTGCACCTCCGCCTGCCCATGTCTGTCCGCCG
CTTGAGCAGCTGGAGCTGCGGCCTGTCTCTATAACTACCTGGATAAAAAACCTGACTGTGAGCGTCCACGTGTC
CCCAGTGGAGGGGCTGTGCTTGGCTGGGGGCGGAGGGCTGGCCAGCAGGTGCTGGTGCCTGCGGGCTCTGCCCG
GCCTGTGTGCTTCTCTGTGGTGGCCACGGCAGCCACCGCTGTGTCTCTGAAGGTGGTGGCTCGAGGGTCTTTCGA
ATTCCCTGTGGGAGATGCGGTGTCCAAGGTTCTGCAGATTGAGAAGGAAGGGGCCATCCATAGAGAGGAGCTGGT
CTATGAACTCAACCCCTTGGACCACCGAGGCCGGACCTTGGAAATACCTGGCAACTCTGATCCCAATATGATCCC
TGATGGGGACTTTAACAGCTACGTACAGGGTTACAGCCTCAGATCCATTGGACACTTTAGGCTCTGAGGGGGCCTT
GTCACCAGGAGGCGTGGCCTCCCTCTTGAGGCTTCCCTCGAGGCTGTGGGGAGCAAACCATGATCTACTTGGCTCC
GACACTGGCTGCTTCCCCTACCTGGACAAGACAGAGCAGTGGAGCACACTGCCTCCCGAGACCAAGGACCACGC
CGTGGATCTGATCCAGAAAGGCTACATGCGGATCCAGCAGTTTCGGAAGGCGGATGGTTCCTATGCGGCTTGGTT
GTCACGGGGCAGCAGCACCTGGCTCACAGCCTTTGTGTTGAAGGTCTGAGTTTGGCCCAGGAGCAGGTAGGAGG
CTCGCCTGAGAACTGCAGGAGACATCTAACTGGCTTCTGTCCCAGCAGCAGGCTGACGGCTCGTTCCAGGACCT
CTCTCCAGTGATACATAGGAGCATGCAGGGGGGTTTGGTGGGCAATGATGAGACTGTGGCACTCACAGCCTTTGT
GACCATCGCCCTTCATCATGGGCTGGCCGTCTTCCAGGATGAGGGTGCAGAGCCATTGAAGCAGAGAGTGGAAGC
CTCCATCTCAAAGGCAAGCTCATTTTGGGGGAGAAAGCAAGTGCTGGGCTCCTGGGTGCCACGCAGCTGCCAT
CACGGCCTATGCCCTGACACTGACCAAGGCCCCCTGCGGACCTGCGGGGTGTTGCCACAACAACCTCATGGCAAT
GGCCCAGGAGACTGGAGATAACCTGTACTGGGGCTCAGTCACTGGTTCTCAGAGCAATGCCGTGTGCCCCACCC
GGCTCCTCGCAACCCATCCGACCCCATGCCCCAGGCCCCAGCCCTGTGGATTGAAACCACAGCCTACGCCCTGCT
GCACCTCCTGCTTCACGAGGGCAAAGCAGAGATGGCAGACCAGGCTGCGGCCTGGCTCACCCGTACGGGCAGCTT
CCAAGGGGGATTCCGCGAGTACCCAAGACACGGTGATTGCCCTGGATGCCCTGTCTGCCTACTGGATTGCCTCCCA
CACCCTGAGGAGAGGGGTCTCAATGTGACTCTCAGCTCCACAGGCCGGAATGGGTTCAAGTCCCACGCGCTGCA
GCTGAACAACCGCCAGATTGCGGCCTGGAGGAGGAGCTGCAGTTTCTTGGGCAGCAAGATCAATGAAGTGAAGT
GGGAGGAAACAGCAAAGGAACCCCTGAAGGTCTTTCGTACCTACAATGTCTTGACATGAAGAACACGACCTGCCA
GGACCTACAGATAGAAGTGACAGTCAAAGGCCACGTCGAGTACAGATGGAAGCAAACGAGGACTATGAGGACTA
TGAGTACGATGAGCTTCCAGCCAAGGATGACCCAGATGCCCCCTCTGCAGCCCGTGACACCCCTGCAGCTGTTTGA
GGGTCGGAGGAACCGCCGAGGAGGGAGCGCCCAAGGTGGTGGAGGAGCAGGAGTCCAGGGTGCCTACACCGT
GTGCATCTGGCGGAACGGCAAGGTGGGGCTGTCTGGCATGGCCATCGCGGACGTACCCCTCCTGAGTGGATTCCA
CGCCCTGCGTGCTGACCTGGAGAAGCTGACCTCCCTCTCTGACCGTTACGTGAGTCACTTTGAGACCGAGGGGCC
CCACGTCTGCTGTATTTTGACTCGGTCCCCACCTCCCGGGAGTGCCTGGGCTTTGAGGCTGTGCAGGAAGTGCC
GGTGGGGCTGGTGCAGCCGGCCAGCGCAACCCCTGTACGACTACTACAACCCCGAGCGCAGATGTTCTGTGTTTTA
CGGGGCACCAAGTAAGAGCAGACTCTTGGCCACCTTGTGTTCTGCTGAAGTCTGCCAGTGTGCTGAGGGGAAGTG
CCCTCGCCAGCGTTCGCGCCCTGGAGCGGGGTCTGCAGGACGAGGATGGCTACAGGATGAAGTTTGCTGCTACTA
CCCCCGTGTGGAGTACGGCTTCCAGGTTAAGGTTCTCCGAGAAGACAGCAGAGCTGCTTTCCGCCTCTTTGAGAC
CAAGATCACCCAAGTCTGCACTTCACCAAGGATGTCAAGGCCGCTGCTAATCAGATGCGCAACTTCCTGGTTTCG
AGCCTCCTGCCGCTTTCGCTTGGAACTGGGAAAGAATATTTGATCATGGGTCTGGATGGGGCCACCTATGACCT
CGAGGGACACCCCCAGTACCTGCTGGACTCGAATAGCTGGATCGAGGAGATGCCCTCTGAACGCTGTGCCGGAG
CACCCGCCAGCGGGCAGCCTGTGCCAGCTCAACGACTTCTCCAGGAGTATGGCACTCAGGGGTGCCAGGTGTG
AGGGCTGCCCTCCACCTCCGCTGGGAGGAACCTGAACCTGGGAACCATGAAGCTGGAAGCACTGCTGTGTCCGC
TTTCATGAACACAGCCTGGGACCAGGGCATATTAAAGGCTTTTGGCAGCA

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FIGURE 2148

ATTCTTGTCTGTTCTGCCTCACTCCCGAGCTCTACTGACTCCCAACAGAGCGCCCAAGAAGAAAATGGCCATAAG
TGGAGTCCCTGTGCTAGGATTTTTCATCATAGCTGTGCTGATGAGCGCTCAGGAATCATGGGCTATCAAAGAAGA
ACATGTGATCATCCAGGCCGAGTTCATCTGAATCCTGACCAATCAGGCGAGTTTATGTTTGACTTTGATGGTGA
TGAGATTTTCCATGTGGATATGGCAAAGAAGGAGACGGTCTGGCGGCTTGAAGAATTTGGACGATTTGCCAGCTT
TGAGGCTCAAGGTGCATTGGCCAACATAGCTGTGGACAAAGCCAACCTGGAAATCATGACAAAGCGCTCCAACCTA
TACTCCGATCACCAATGTACCTCCAGAGGTAACCTGTGCTCACGAACAGCCCTGTGGAACTGAGAGAGCCCAACGT
CCTCATCTGTTTCATAGACAAGTTCACCCCAACAGTGGTCAATGTCACGTGGCTTCGAAATGGAAAACCTGTAC
CACAGGAGTGTGAGAGACAGTCTTCCTGCCCAGGGGAAGACCACCTTTTCCGCAAGTTCCACTATCTCCCCTTCCT
GCCCTCAACTGAGGACGTTTACGACTGCAGGGTGGAGCACTGGGGCTTGGATGAGCCTCTTCTCAAGCACTGGGA
GTTGATGCTCCAAGCCCTCTCCAGAGACTACAGAGAACGTGGTGTGTGCCCTGGGCCTGACTGTGGGTCTGGT
GGGCATCATTATTGGGACCATCTTCATCATCAAGGGATTGCGCAAAAGCAATGCAGCAGAACGCAGGGGGCCTCT
GTAAGGCACATGGAGGTGATGGTGTTCCTTAGAGAGAAGATCACTGAAGAACTTCTGCTTTAATGGCTTTACAA
AGCTGGCAATATTACAATCCTTGACCTCAGTGAAAGCAGTCATCTTCAGCATTTTCCAGCCCTATAGCCACCCCA
AGAGTGGTTATGCCTCCTCGATTGCTCCATACTCTAACATCTAGCTGGCTTCCCTGTCTATTGCCTTTTCCTGTA
TCTATTTTCCTCTATTTCCCTATCATTTTATTATCACCATGCAATGCCTCTGGAATAAAACATACAGGAGTCTGTC
TCTGCTATGGAATGCCCCATGGGGCATCTCTTGTGTACTTATTGTTTAAGGTTTCCTCAAACCTGTGATTTTTCTG
AACACAATAAACTATTTTGAAGATCTTGGGTGGAA

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FIGURE 2149

MAISGVPVLGFFIIA VLMSAQESWAIKEEHVIIQA E FYLNPDQSGEFMFDGDEIFHVDMAKKETVWRLEEFGR
FASF EAQGALANIAVDKANLEIMTKRSNYTPIITNVPPEVTVL TN SPVELREPNVLICFIDKFTPPVVNVTLRNG
KPVITGVSETVFLPREDHLFRKFHYLPFLPSTEDVYDCRVEHWGLDEPLLKHWEFDAPSPLPETTENVVCALGLT
VGLVGIIIGTIFI I KGLRKSNA AERRGPL

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FIGURE 2150

ATGAAGGCCAACTACAGCGCAGAGGAGCGCTTTCTCCTGCTGGGTTTCTCCGACTGGCCTTCCCTGCAGCCGGTC
CTCTTCGCCCTTGTCTCCTGTGCTACCTCCTGACCTTGACGGGCAACTCGGCGCTGGTGCTGCTGGCGGTGCGC
GACCCGCGCCTGCACACGCCCATGTACTACTTCTCTGCCACCTGGCCTTGGTAGACGCGGGCTTCACTACTAGC
GTGGTGCCGCCGCTGCTGGCCAACCTGCGCGGACCAGCGCTCTGGCTGCCGCGCAGCCACTGCACGGCCCAGCTG
TGCGCATCGCTGGCTCTGGGTTCCGCCGAATGCGTCCTCCTGGCGGTGATGGCTCTGGACCGCGCGCCGCGAGTG
TGCCGCCCCGCTGCGCTATGCGGGGCTCGTCTCCCCGCGCCTATGTCGCACGCTGGCCAGCGCCTCCTGGCTAAGC
GGCCTCACCAACTCGGTTGCGCAAACCGCGCTCCTGGCTGAGCGGCCGCTGTGCGCGCCCCGCTGCTGGACCAC
TTCATCTGTGAGCTGCCGGCGTTGCTCAAGCTGGCCTGCGGAGGCGACGGAGACACTACCGAGAACCAGATGTTT
GCCGCCCCGCTGGTCATCCTGCTGCTGCCGTTTGCCGTCATCCTGGCCTCCTACGGTGCCGTGGCCCCGAGCTGTC
TGTTGCATGCGGTTTACGCGAGGCCGGAGGAGGGCGGTGGGCACGTGTGGGTCCCACCTGACAGCCGTCTGCCTG
TTCTACGGCTCGGCCATCTACACCTACCTGCAGCCGCGCAGCGCTACAACCAGGCACGGGGCAAGTTCGTATCG
CTCTTCTACACCGTGGTCACACCTGCTCTCAACCCGCTCATCTACACCCTCAGGAATAAGAAAGTGAAGGGGGCA
GCGAGGAGGCTGCTGCGGAGTCTGGGGAGAGGCCAGGCTGGGCAGTGA

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FIGURE 2151

MEGTQEYDSSMQTVRFQGERRKSPSNATFSPFFWMPHSAKSLVADAGIHSRNQHSYAIASFIKYSQLHFKSRESR
AGARDQPIIWKLKANYSAEERFLLLGFSWPSLQPVLFALVLLCYLLTLTGNSALVLLAVRDPRLHTPMYYFLCH
LALVDAGFTTTSVVPPLLANLRGPALWLPRSHCTAQLCASLALGSAECVLLAVMALDRAAAVCRPLRYAGLVSPRL
CRTLASASWLSGLTNSVAQTALLAERPLCAPRLLDHFICELPALLKLACGGDGDTTENQMFAARVVILLLPFAVI
LASYGAVARAVCCMRFSGGRRRAVGTCGSHLTAVCLFYGSAIYTYLQPAQRYNQARGKFVSLFYTVVTPALNPLI
YTLRNKKVKGAARRLLRSLGRGQAGQ

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FIGURE 2152

GAGAGCACGACGTGCGCGCACCCCTCTCCCCTTGTCCACTGCTGCCGCCTCCTTCTTCTGCCGCTCCTGGTGCTGC
TTGTGTGCTCGTTTGGAGCGGACCTGGTACCTCTTTTGTGAAGCGGCAGCTGAGGAGACTCCGGCGCTCGCCATG
GCCGAAGAAAAGCCCAAGGAAGGAGTCAAGACTGAGAACAACGATCATATTAATTTGAAGGTGGCGGGGCAGGAT
GGTTCTGTGGTGCAGTTTAAAGATTAAGAGGCATACACCACTTAGTAAACTAATGAAAGCCTATTGTGAACGACAG
GGATTGTCAATGAGGCAGATCAGATTCCGATTTCGACGGGCAACCAATGAAACAGACACACCTGCACAGTTGGAAA
TGGAGGATGAAGATACAATTGATGTGTTCCAACAGCAGACGGGAGGTGTCTACTGAAAAGGGAACCTGCTTCTTT
ACTCCAGAACTCTGTTCTTTAAAGACCAAGATTACATTCTCAATTAGAAAACTGCAATTTGCTTCCACCACATCC
TGACTACTACCGTATAGTTTTCTCTATTCTTTCAATTTCCCCCTTCCCCATTCTTTACTGTACATAAAGTAACTG
GTATATGTGCACAAGCATATTACTTTTTTTTTTTTAAAACTAAACAGCCAATGGTATGTTTTGATTGACATCAAGT
GGAGACGGGGCGGAAAAATACTGATTCTGTGAAAATACCCCCTTCTCCATTAGTGGCATGCTCATTAGCTCTT
ATCTTTATATTCCAGTAAGTTATTTTGCTCTCACTGTTTTAACAACAACAACAAAAAACAACAACATAAAAAATC
CTTGATACCTTGTTCAATTGGAGAATTTTAAATGTTTTTCATTTATCATTGTAAAACCAAGGACAATTTTATAAC
TTTTTGTACTTAGCTGTTACATGCAGAGCAATCTGTCTTTAAGTAGGGATAAATTACTCTAAAACAAAAAAGAA
TCCTAGATAGTTTTCCCTTCAAGTCAAGCGTCTTGTTGTTTAAATAAACTTCTTGTTTAAAA

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FIGURE 2153

MAEEKPKEGVKTENNDHINLKVAGQDGSVVQFKIKRHTPLSKLMKAYCERQGLSMRQIRFRFDGQPMKQTHLHSW
KWRMKIQLMCSNSRREVSTEGTCCFFPELCSLTKITFSIRKLQFASTTS

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FIGURE 2154

GCGCACCCCTCTCCCCTTGTCCTGCTGCCGCCTCCTTCTTCTGCCGCTCCTGGTGCTGCTTGTGTGCTCGTTTG
GAGCGGACCTGGTACCTCTTTTGTGAAGCGGCAGCTGAGGAGACTCCGGCGCTCGCCATGGCCGAAGAAAAGCCC
AAGGAAGGAGTCAAGACTGAGAACAACGATCATATTAATTTGAAGGTGGCGGGGCAGGATGGTTCTGTGGTGCAG
TTTAAGATTAAGAGGCATACACCACTTAGTAACTAATGAAAGCCTATTGTGAACGACAGTGGAAATGGAGGATG
AAGATACAATTGATGTGTTCCAACAGCAGACGGGAGGTGTCTACTGAAAAGGGAACCTGCTTCTTTACTCCAGAA
CTCTGTTCTTTAAAGACCAAGATTACATTCTCAATTAGAAAAGTGAATTTGCTTCCACCACATCCTGACTACTA
CCGTATAGTTTTCTCTATTCTTTTCATTTCCCCCTTCCCCATTCTTTACTGTACATA

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FIGURE 2155

AGACGCCGAGATGCTGGTCATGGCGCCCCGAACCGTCCTCCTGCTGCTCTCGGCGGCCCTGGCCCTGACCGAGAC
CTGGGCGGGCTCCCACTCCATGAGGTATTTCTACACCTCCGTGTCCCGGCCCGGCCGCGGGGAGCCCCGCTTCAT
CTCAGTGGGCTACGTGGACGACACCCAGTTTCGTGAGGTTCGACAGCGACGCCGCGAGTCCGAGAGAGGAGCCGCG
GGCGCCGTGGATAGAGCAGGAGGGGCCGGAGTATTGGGACCGGAACACACAGATCTACAAGGCCCAGGCACAGAC
TGACCGAGAGAGCCTGCGGAACCTGCGCGGCTACTACAACCAGAGCGAGGCCGGGTCTCACACCCTCCAGAGCAT
GTACGGCTGCGACGTGGGGCCGGACGGGCGCCTCCTCCGCGGGCATGACCAGTACGCCTACGACGGCAAGGATTA
CATCGCCCTGAACGAGGACCTGCGCTCCTGGACCGCCGCGGACACGGCGGCTCAGATCACCCAGCGCAAGTGGGA
GGCGGCCCGTGAGGCGGAGCAGCGGAGAGCCTACCTGGAGGGCGAGTGCCTGGAGTGGCTCCGCAGATACCTGGA
GAACGGGAAGGACAAGCTGGAGCGCGCTGACCCCCCAAAGACACACGTGACCCACCACCCCATCTCTGACCATGA
GGCCACCCTGAGGTGCTGGGCCCTGGGTTTCTACCCTGCGGAGATCACACTGACCTGGCAGCGGGATGGCGAGGA
CCAAACTCAGGACACTGAGCTTGTGGAGACCAGACCAGCAGGAGATAGAACCTTCCAGAAGTGGGCAGCTGTGGT
GGTGCCCTTCTGGAGAAGAGCAGAGATACACATGCCATGTACAGCATGAGGGGCTGCCGAAGCCCTCACCCCTGAG
ATGGGAGCCGTCTTCCCAGTCCACCGTCCCCATCGTGGGCATTGTTGCTGGCCTGGCTGTCCTAGCAGTTGTGGT
CATCGGAGCTGTGGTCGCTGCTGTGATGTGTAGGAGGAAGAGTTTCAAGGTGGAAAAGGAGGGAGCTACTCTCAGGC
TGCGTGACGCGACAGTGCCCGAGGGCTCTGATGTGTCTCTCACAGCTTGAAAAGCCTGAGACAGCTGTCTTGTGAG
GGACTGAGATGCAGGATTTCTTACGCCTCCCCTTTGTGACTTCAAGAGCCTCTGGCATCTCTTTCTGCAAAGGC
ACCTGAATGTGTCTGCGTCCCTGTTAGCATAATGTGAGGAGGTGGAGAGACAGCCACCCTTGTGTCCACTGTGA
CCCCTGTTCGCATGCTGACCTGTGTTTCTCCCCA .

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FIGURE 2156

MLVMAPRTVLLLLSAALALTETWAGSHSMRYFYTSVSRPGRGEPRFISVGIVDDTQFVRFDSDAASPREEPRAPW
IEQEGPEYWDNRNTQIYKAQAQTDRESLRNLRGYYNQSEAGSHTLQSMYGCDVGPDGRLLRGHDQYAYDGKDYIAL
NEDLRSWTAADTAAQITQRKWEAAREAEQRRAYLEGECEVWLRRYLENGKDKLERADPPKTHVTHHPISDHEATL
RCWALGFYPAEITLTWQRDGEDQTQDELVETRPAGDRTFQKWAAVVVPSGEEQRYTCHVQHEGLPKPLTLRWEF
SSQSTVPIVGIVAGLAVLAVVIGAVVAAVMCRRKSSGGKGGSYSQAACSDSAQGSVDVSLTA

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FIGURE 2157

GGCGCCCCGAACCGTCCTCCTGCTGCTCTCGGCGGGCCCTGGCCCTGACCGAGACCTGGGCCGCCCCAGGCTCCCA
CTCCATGAGGTATTTTCGACACCGCCATGTCCCGGCCCGGCCGCGGGGAGCCCCGCTTCATCTCAGTGGGCTACGT
GGACGACACGCAGTTTCGTGAGGTTTCGACAGCGACGCCGCGAGTCCGAGAGAGGAGCCGCGGGCGCCGTGGATAGA
GCAGGAGGGGCGGAGTATTGGGACCGGAACACACAGATCTTCAAGACCAACACACAGACTGACCGAGAGAGCCT
GCGGAACCTGCGCGGCTACTACAACCAGAGCGAGGCCGGGTCTCACACCCTCCAGAGCATGTACGGCTGCGACGT
GGGGCCGGACGGGCGCCTCCTCCGCGGGCATAACAGTACGCCTACGACGGCAAGGATTACATCGCCCTGAACGA
GGACCTGCGCTCCTGGACCGCGGCGGACACCGCGGCTCAGATCACCAGCGCAAGTGGGAGGCGGCCCGTGTGGC
GGAGCAGGACAGAGCCTACCTGGAGGGCACGTGCGTGGAGTGGCTCCGCAGATACCTGGAGAACGGGAAGGACAC
GCTGGAGCGCGCGGACCCCCCAAAGACACACGTGACCCACCACCCCATCTCTGACCATGAGGCCACCCTGAGGTG
CTGGGCCCTGGGCTTCTACCCTGCGGAGATCACACTGACCTGGCAGCGGGATGGCGAGGACCAAACTCAGGACAC
TGAGCTTGTGGAGACCAGACCAGCAGGAGATAGAACCTTCCAGAAGTGGGCAGCTGTGGTGGTGCCTTCTGGAGA
AGAGCAGAGATACACATGCCATGTACAGCATGAGGGGCTGCCGAAGCCCCCACCCTGAGATGGGAGCCGTCTTC
CCAGTCCACCGTCCCCATCGTGGGCATTGTTGCTGGCCTGGCTGTCTTAGCAGTTGTGGTCATCGGAGCTGTGGT
CGCTGCTGTGATGTGTAGGAGGAAGAGCTCAGGTGGAAAAGGAGGGAGCTACTCTCAGGCTGCGTGCAGCGACAG
TGCCCAGGGCTCTGATGTGTCTCTCACAGCTTGAAAAGCCTGAGACAGCTGTCTTGTGAGGGACTGAGATGCAGG
ATTTCTTCACGCCTCCCCTTTGTGACTTCAAGAGCCTCTGGCATCTCTTTCTGCAAAGGCACCTGAATGTGTCTG
CGTCCCTGTTAGCATAATGTGAGGAGGTGGAGAGACAGCCACCCTTGTGTCCACTGTGACCCCTGTTCCCATGC
TGACCTGTGTTTCTCCCCAGTCATCTTTCTTGTTCAGAGAGGTGGGGCTGGATGTCTCCATCTCTGTCTCAAC
TTTACGTGCACTGAGCTGCAACTTCTTACTTCCCTACTGAAAATAAGAATCTGAATATAAATTTGTTTTCTCAA
TATTTGCTATGAGAGGTTGATGGATTAAATAAATAAGTCAATTCTGGAATTTGAGAGAGCAAATAAAGACCTGA
GA

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FIGURE 2158

MLVMAPRTVLLLLSAALALTETWAGSHSMRYFDTAMSRPGRGEPRFISVGIVDDTQFVRFDSDAASPREEPRAPW
IEQEGPEYWDNRNTQIFKTNTQTDRESLRNLRGYYNQSEAGSHTLQSMYGCDVGPDGRLLRGHNQYAYDGKDYLAL
NEDLRSWTAADTAAQITQRKWEAARVAEQDRAYLEGTCVEWLRRLRYLENGKDTLERADPPKTHVTHHPISDHEATL
RCWALGFYPAEITLTWQRDGEDQTQDTELVEVTRPAGDRTFQKWAAVVVP SGEEQRYTCHVQHEGLPKPLTLRWEF
SSQSTVPIVGIVAGLAVLAVVVIGAVVAVMCRRKSSGGKGGSYSQAACSDSAQGS DVSLTA

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FIGURE 2159

CCGAGCTTCTTAAACACAGGCCCTTGGGCCTACGGCTCTGGGGGTACTTGGGGGGGCGGGGGCAGGTCTGATGAGT
AACCCCTCCCCCAGGTTCCAGAGGAAGAAGCCTCCACATCTGTCTGCCGGCCCAAGAGTTCCATGGCCTCCACT
TCCCGCCGCCAACGCCGAGAACGTCGCTTTTCGTCGTTACTTGTCTGCAGGACGGCTGGTCCGGGCCCAGGCCCTC
CTCCAGCGACACCCAGGCCCTCGATGTAGATGCTGGGCAGCCCCCACCCTGCAACGGGGCCTGTGCCCGCCACGAT
GCCCCTGCCCTGTGCTGTGCTTCGGCTCGGGGCTGACCCCTGCCACCAGGACCGCCATGGGGACACGGCACTG
CATGCTGCTGCCCCGCCAGGGCCCAGATGCCTACACCGATTTCTTCCTCCCGCTGCTAAGCCGCTGTCCCTCCGCC
ATGGGAATAAAGAATAAGGATGGGGAGACCCCTGGCCAAATTTTGGGCTGGGGACCCCCCTGGGATTCTGCTGAA
GAGGAGGAAGAAGATGATGCCTCCAAGGAGCGGGAATGGAGACAGAAGCTCCAGGGTGAGCTGGAGGACGAGTGG
CAGGAAGTCATGGGGAGGTTTGAAGGTGATGCCTCCCATGAAACCCAGGAACCTGAGTCCTTCTCAGCCTGGTCA
GATCGCCTGGCCCCGGGAACATGCCCAGAAGTGCCAGCAGCAGCAGCGAGAAGCAGAGGGATCCCGTCGACCCCCA
CGTGCTGAGGGCTCCAGCCAGAGCTGGCGACAGCAGGAGGAGGAGCAGCGGCTCTTCAGGGAGCGAGCCCGGGCC
AAGGAGGAAGAGCTGCGTGAGAGCCGAGCCAGGAGGGCGCAGGAGGCTCTAGGGGACCGAGAACCCAAGCCAACC
AGGGCCGGGGCCAGGGAAGAGCACCCAGAGGAGCGGGGAGGGGCAGCCTCTGGCGATTTGGTGATGTGCCCTGG
CCCTGCCCTGGGGGAGGGGACCCAGAGGCCATGGCTGCAGCCCTGGTGGCCAGGGGCCCCCCTTTGGAGGAACAG
GGGGCTCTGAGGAGGTACTTGAGGGTCCAGCAGGTCCGCTGGCACCCCTGACCGCTTCTGCAGCGATTCCGAAGC
CAGATTGAGACCTGGGAGCTGGGCCGTGTGATGGGAGCAGTGACAGCCCTTTCTCAGGCCCTGAATCGCCATGCA
GAGGCCCTCAAGTGACCCTAGGGAAGAAGCAAGAACTTCGGGGCTGCAGCCTCAGGATGAGGCAGAAGGAAGGG
TAAGGGAAAGGATGGGGACCACAAGGAAGAGCCAGGTGCTGCTCAGCAGAGGATATGGGTGGGAGCGAAAGTTGT
AACAAAGTGGGGGTGGGGGGTGCGGGCCGCCACCCTGCTCCTTGACTCTGCCGTTTCTTAATAAGACCTGGTTCC
ACATCTC

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FIGURE 2160

TCTAATACCTATTGATCTGTTACTTTCTCCCATCACGCTCAGGTGGGAACATCCAGTTGCAGGAAAACAAGCTTA
ACACGCCCCTGATTCTACATTATGGTGAGTTCTATAATTATTTTATTATATATTACAGTGTAATAATGGAAATA
AAGTGCCCTAATAAATGCAAATGTGCTTACATCTTTTGGCCCAGCTCCTACCTCCCGGCAGCCTCTCCAGGCCCAG
AACTTTCTCCAGTCAGCCTCTACAGACCAAGCTCATGACTCTCAATGGCCTATTTAGGCCCATACCCTACGTCAC
GGCAGCCTCCGCAGATGAGGCTACTGCCTCACAACAGCCTCCACAGGCACAGCTCCATCGTTACAATGGCCTCTT
TAGACCCAGCTCCTGCCTCCCAGCCTTCTCTCCAGGCCCTGAACTTTCTCAAGTTGACCTCACCAGGCCCAGCTC
ATGCTTCTTTGCAGCCTCTCCAGGCCCAGCTCCTGCATCTTGGTGGCCCCCTCCAGGCCCAGCCTCTGCCTCCCGT
CAGCCTCTACAGTCCCAACGTCTGCCTCACAGCAGATTCTTCACGCCCAGCTTCTACCTCACTTGGACCCCTCCAG
ACCCAGATGGTGTCTCACTGTGGCATCCTCAGGTGAAGCTCCTGCCTTTCGGCAGCCTCTCCAGGCCCAGCTCCT
CCTGCCTCCCAGTGGCCTCTTTCGGCCCAGCCCAGCTCATGCCTCCCGGCGGCCTTCCCAAGCCCCGCTTTTGAC
TTTCGGTGGCCTCTGCAGGCCTCGACAAGGCCAGCCTCCTGCCTCCCGAAGGCCTGCACAGGCCCAGCCTCTGC
CTCACAGCGGACTCTC

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FIGURE 2161

TGAGGGAGTGAGGGAAGCTTCCTCTGTATTTACAGCCACTCCCCTTTGCTCACATTCCCGCCTGAGCTCCACCTT
CTCAGATGAGCAGCAGCATTAGATGCTCATAGGAGAACGCACCCTGTTGTGAACCATGCATGTGAGGGATCTAGG
TTGCGCTGTCTTATGAGAGTCTAATACCTATTGATCTGTCACTTTCTCCCATCACGCTCAGGTGGGAACATCCA
GTTGCAGGAAAACAAGCTTAACACGCCCCACTGATTCTACATTATGCTCCTACCTCCCGGCAGCCTCTCCAGGCCC
AGAACTTTCTCCAGTCAGCCTCTACAGACCAAGCTCATGACTCAAAATGGCCTATTTAGGCCCATAACCCTACGTC
ACGGCAGCCTCCGCAGATGAGGCTACTGCCTCACAACAGCCTCCACAGGCACAGCTCCATCGTTACAATGGCCTC
TTTAGACCCAGCTCCTGCCTCCCAGCCTTCTCTCCAGGCCCTGAACATTCTCAGGTCTCCCTCTGTTGTCCAAGG
CTGGAGTGAGTAGTGCTATCGCAGCTGACTGCAGCCTCAACCTTCCAGGCTGAAGCGATCCTCCCACGTCAACC
TCCCACGTGGCTGAGACTACAGGTGCTTGCCACTATGCCCAACTAATATTTGGAATTTTCATATACGTGGATTCC
AGAGGGGTGACAGCGAAACGTGGGAACATCCAGTTGCAGGAAAACAAGCTTAACACGCCCCACTGATTCTACATTA
TGCTCCTACCTCCCGGCAGCCTCTCCAGGCCCAGAACTTTCTCCAGTCAGCCTCTACAGACCAAGCTCATGACTC
TCAATGGCCTATTTAGGCCCATAACCCTACGTACGGCAGCCTCCGCAGATGAGGCTACTGCCTCACAACAGCCTC
CACAGGCACAGCTCCATCGTTACAATGGCCTCTTTAGACCCAGCTCCTGCCTCCCAGCCTTCTC

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FIGURE 2162

MAYLGPYFTSRQPPQMRLLPHNSLHRHSSIVTMASLDPAPASQPSLQALNFLKLTSPGPAHASLQPLQAQLLHLG
GPSRPSLCLEPSASTVPTSASQQILHAQLLPHLDPPDPDGVSLWHPQVKLLPFGSLSRPSSSCLPVASF GPAQLMP
PGGLPKPRF

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FIGURE 2163

GGCACGAGGGCCGGAAGGCGGCGTCCGCGACGCAGCTGTTCACGCTTAGGTGGGCGACGTGGGCGCAGGTGGGCG
CAGGATGGCAAAACAGAAGAGAAAAGTTCTGAAGTGACAGAGAAAAAGAAACAAAAGCTGAAGAAGGCGTCAGC
AGAGGGGGCCACTGCTGGGCCCTGAGGCTGCACCAAGTGGCGAAGGAGCCGGCTCCAAGGGCGAAGCTGTGCTCAG
GCCCCGGGCTGGACGCAGAGCCAGAGCTGTCCCCAGAGGAGCAGAGGGTCTTGAAAGGAAGCTGAAAAAGGAACG
GAAGAAAGAGGAGAGGCAGCGTCTGCGGGAGGCAGGCCTTGTTGGCCCAGCACCCGCCTGCCAGGCGCTCGGGGGC
CGAACTGGCCCTGGACTACCTCTGCAGATGGGCCCAAAAGCACAAAGAACTGGAGGTTTCAGAAGACGAGGCAGAC
GTGGCTCCTGCTGCACATGTATGACAGTGACAAGGTTCCCGATGAGCACTTCTCCACCCTGCTGGCCTACCTGGA
GGGGCTGCAGGGCCGGGCCCCGAGAGCTGACGGTGCAGAAGGCGGAAGCCCTGATGCGGGAGCTGGATGAGGAGGG
CTCTGATCCCCCCTGCCGGGGAGGGCCCAGCGCATCCGACAGGTGCTGCAGCTGCTCTCCTAGTGGGTTTCAGCG
CGGGGCGGGGCCGCTGCCAGTGCAAGGCTGCCCTCAGACCACACAGGGTGCACTCCTCCGGCGGTGGGGGCCGG
GTTACCAGCAGGGCAGCGGCTGAGCAAGGGCTTTCAGCTCCTCCGGTGGTGGGGGCCGGGATCACCAGCACCAG
AGCCTCGCAAGGGCCCCCTTCCCTCCTCCAGACCCCTCCTGGCCGGTGACGGCTGTGACAGTGATGGCAGGTTTCAG
TGCCTTTCAGCGCAGAGCGTGGATGCTCTGGAATCACCCGGACCCCTGGCCTTGAGGGACCCCTCCAGCCCCAGGA
ATCTGCTTTGGAGGGAAATGTCTATTTTCTACCGGGAATATTTTAGAGATTGGGGCATGCTGGCTCCTCCCGCC
AGCTGCAAACCTGCACCTTCCGCCTGATCCCGATCCCCCTGCGTGGGCCGCATTCTGGTCCCCCTGCCTGCGTC
CATCGAGGGGCTGGCTGTGGCCTGTTTTCTTTGACCCACACAGCGTCATTGCGGGTCATGGGGAGCCCCCTGG
TGGGAGCTTGTGGAGTCGGATCACGTACCTGTGCAGAAACCGCCTCTGTGGCTGCATTGAAATAAAACCCGACC
CAGCAGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2164

MAKQKRKVPEVTEKKNKKLKKASAEGPLLGPEAAPSGEGAGSKGEAVLRPGLDAEPELSPEEQRVLERKLKKERK
KEERQRLREAGLVAQHPPARRSGAELALDYLCRWAQKHKNWRFQKTRQTWLLLHMYDSDKVPDEHFSTLLAYLEG
LQGRARELTVQKAEALMRELDEEGSDPPLPGRAQRIRQVLQLLS

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FIGURE 2165

GCGGCGCGCTGCAGGCGCGGGGAACACCAATGCGGGGTACTTGAAGCTGGTGTGTGTTTCCTTTCAGCGTCAAG
GGTTCCACACTGTTGGGAGTCGCTGCAAGAATCGGACAGGCGCTGAGCACCTGTGGCTGACCCGACATCTCAGGG
ACCCATTTGTGAAGGCTGCGAAGGTGGAGAGTTACCGGTGTCGAAGCGCCTTCAAGCTCCTGGAGGTGAACGAGA
GGCACCAGATTCTGCGGCCCGGCCTTCGGGTGTTAGACTGTGGGCGAGCTCCTGGGGCCTGGAGTCAGGTGGCGG
TGCAGAAGGTCAACGCCGCAGGCACAGATCCCAGCTCTCCTGTTGGCTTCGTGCTTGGGGTAGATCTTCTTCACA
TATTCCCCCTGGAAGGAGCAACTTTTCTGTGCCCTGCTGACGTGACTGACCCGAGAACCTCACAGAGAATCCTCG
AGGTGCTTCCTGGCAGGAGAGCAGATGTGATTCTGAGCGACATGGCGCCCAATGCCACAGGGTTCCGGGACCTCG
ATCATGACAGGCTCATCAGCCTGTGCCTGACCCTTCTCAGCGTGACCCAGACATCCTGCAACCTGGGGGGACAT
TCCTTTGTAAAACCTGGGCTGGAAGTCAAAGCCGTCGGTTACAGAGGAGACTGACAGAGGAATCCAGAATGTAA
GGATCATCAAACCTGAAGCCAGCAGGAAAGAGTCATCAGAAGTGTACTTCTTGCCACACAGTACCACGGAAGGA
AGGGCACTGTGAAGCAGTGAAGGATTTCTTGTCCTTTTTCATAATGGTCATTAGCTCCTTTTAAGCTAGAAACGT
AGCCTGAGCTCCTGAAGAGTTCTTGGGAGATTTGAGCTGATTTTGGAGATGGAGCAGGACAAGTGGGGAGTCTCT
CTCTCTCTTTCTCTCTCTCTTTTTTAACCAAAAAGAGATGACAAAATAAGTTCAGGGGCCATGGAAAATGAAA
AAGTCCGCTATATTGTGATTTGGGAAGAGAAAGTTATCAAGAGAAAGAGGTGAGGATGGAAGGATGGAGAAAAC
AGACTGTGGGAAGGATCAGAAGGAATCCGCCGAGGCAGGGATGGGTGTGCCATGTGTGCCTTGACGGGACTTCA
TCTTATAGACTGTTAACTGTACACACAAAACAGGCTTCCACCCCTGCTCTGAGAGCACCACGCACAGATTCC
AGTTCTTAGTGTGGCTGTTTAAAGTAGAAAATCTGGGGGCTGGGTGAGGCCACTCATGCCTGTAAACCCAGGGCT
TTAGAAGGCTGAGGCTGGGGGATTGCTTGAAGTCAGGAGTTCAAGACCAACCTGGGCAACATAGCAACACCCCCC
ATGTCTACAAAATGAAAAACCAAAAGCAAACCAAAAGAAAAATCTGAAATTTCCATCTGGGGATTAACTTCTG
TCTTTCTGGTGAACAATATAGCAATTCACGCATTCTTCAAGCAGCAAAAGTTCCCGGAACAATTAGGGAAGACGT
ATGGTCTGAATTTATCCAGGCAGTGGGTCTGCTTTGGTTTTTGTCTGGAAATTTATATCAGTGTCTGGGCTCCCAA
GAACATAAATGTAATTGCCAAAGCAAAAAA

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FIGURE 2166

MAGYLKLVCSFQRQGFHTVGSRCKNRTGAEHLWLTRHLRDPFVKAAKVESYRCRSFAFKLLEVNERHQILRPGLR
VLDCGAAPGAWSQVAVQKVNAAGTDPSSPVGFVLGVDLLHIFPLEGATFLCPADVTDPRISQRILEVLPGRADV
ILSDMAPNATGFRDLHDRLISLCLTLLSVTPDILQPGGTFLCKTWAGSQSRRLQRRLTEEFQNVRIIKPEASRK
ESSEVYFLATQYHGRKGTVKQ

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FIGURE 2167

CGGCGGCCGCGGAGCCCTGCGAGTAGGCAGCGTTGGGCCCCATGCAGGACGCGGAGAACGTGGCGGTGCCCGAGGC
GGCCGAGGAGCGCGCCGAGCCCGGCCAGCAGCAGCCGGCCGCCGAGCCGCCGAGCCGAGGGGCTGCTGCGGCC
CGCGGGGGCCCGCGCTCCGGAGGCCGCGGGGACCGAGGCCTCCAGTGAGGAGGTGGGGATCGCGGAGGCCGGGCC
GGAGTCCGAGGTGAGGACCGAGCCGGCGGCCGAGGCAGAGGCGGCCTCCGGCCCCGTCGAGTCCGCTCGCCGCC
GGCCGCCGAGGAGCTGCCCCGGTTCGATGCTGAGCCCCCTGTCCCGGCACAGGGCGAGGCCCCAGGAGAGCAGGC
TCGGGACGAGCGCTCCGACAGCCGGGCCAGGCGGTGTCCGAGGACGCGGGAGGAAACGAGGGCAGAGCGGCCGA
GGCCGAACCCCGGGCGCTGGAGAACGGCGACGCGGACGAGCCCTCCTTCAGCGACCCGAGGACTTCGTGGACGA
CGTGAGCGAGGAAGAATTACTGGGAGATGTACTCAAAGATCGGCCCCAGGAAGCAGATGGAATCGATTCCGTGAT
TGTAAGTGGACAATGTCCCTCAGGTGGGACCCGACCGACTTGAGAACTCAAAAATGTCATCCACAAGATCTTTTC
CAAGTTTGGGAAAATCACAAATGATTTTATCCTGAAGAGGATGGGAAGACAAAAGGGTATATTTTCTGGAGTA
CGCGTCCCCTGCCCACGCTGTGGATGCTGTGAAGAAGCGCGACGGCTACAAGCTTGACAAGCAGCACACATTCCG
GGTCAACCTCTTTACGGATTTTGACAAGTATATGACGATCAGTGACGAGTGGGATATTCCAGAGAAACAGCCTTT
CAAAGACCTGGGGAACCTTACGTTACTGGCTTGAAGAGGCAGAATGCAGAGATCAGTACAGTGTGATTTTGGAG
TGGAGACCGCACTTCCATATTCTGGAATGACGTAAAGACCCCTGTCTCAATTGAAGAAAGAGCGAGATGGACAGA
GACGTATGTGCGTTGGTCTCCTAAGGGCACCTACCTGGCTACCTTTTCATCAAAGAGGCATTGCTCTATGGGGGGG
AGAGAAATTCAGCAAATTCAGAGATTCAGCCACCAAGGGGTTAGCTTATTGACTTCTCACCTTGTGAAAGGTA
CCTGGTGACCTTTAGCCCCCTGATGGACACGCAGGATGACCTCAGGCCATAATCATCTGGGACATCCTTACGGG
GCACAAGAAGAGGGGTTTTCACTGTGAGAGCTCAGCCATTGGCCTATTTTTAAGTGGAGCCATGATGGCAAATT
CTTTGCCAGAATGACCCTGGATACGCTTAGCATCTATGAAACTCCTTCTATGGGTCTTTTGGACAAGAAGAGTTT
GAAGATCTCTGGGATAAAAGACTTTTCTTGGTCTCCTGGTGGTAACATAATCGCCTTCTGGGTGCCTGAAGACAA
AGATATTCAGCCAGGGTAACCCTGATGCAGTCCCTACCAGGCAAGAGATCCGAGTGAGGAACCTGTTCAATGT
GGTGGAGTCAAGCTCCATTGGCAGAAGAAGGAGACTACTTGTGTGTGAAAGTAGATAGGACTCCGAAAGGCAC
CCAGGGTGTGTCAAAATTTTGAATTTTCCGAATGAGGGAGAAACAGGTACCTGTGGATGTGGTTCGAGATGAA
AGAAACCATCATAGCCTTTGCCTGGGAACCAAAAGTAAGTTGCTGTGCTGCACGGAGAGGCTCCGCGCAT
ATCTGTGTCTTTCTACCACGTCAAAAACAACGGGAAGATTGAATCATCAAGATGTTTCGACAAGCAGCAGCGCAA
CACCATCTTCTGGAGCCCCCAAGGACAGTTTCGTGGTGTGGCGGGCCTGAGGAGTATGAACGGTGCCCTAGCGTT
TGTGGACACTTCGGACTGCACGGTCATGAACATCGCAGAGCACTACATGGCTTCCGACGTGCAATGGGATCCTAC
TGGGCGCTACGTGCTACCTCTGTGCTCCTGGTGGAGCCATAAGGTGGACAACGCGTACTGGCTGTGGACTTTCCA
GGGACGCCTCCTGCAGAAGAACAACAAGGACCGCTTCTGCCAGCTGCTGTGGCGGCCCGGCCCTCCACACTCCT
GAGCCAGGAACAGATCAAGCAAATTAAGGAAGGATCTGAAGAAATACTCTAAGATCTTTGAACAGAAGGATCGTTT
GAGTCAGTCCAAAGCCTCAAAGGAATTGGTGGAGAGAAGGCGCACCATGATGGAAGATTTCCGGAAGTACCGGAA
AATGGCCCAGGAGCTCTATATGGAGCAGAAAAACGAGCGCCTGGAGTTGCGAGGAGGGGTGGACACTGACGAGCT
GGACAGCAACGTGGACGACTGGGAAGAGGAGACCATTGAGTTCTTCGTCACTGAAGAAATCATTCCCCTCGGGAA
TCAGGAGTGACCTGGAGCACTGTGCGCAGCCGTGTGTGCTGTGGAGCCGAGGCCGTCTTCGAGGAAGCCGCGTGA
CTCCCGCCTCCTCCTGTGCTCTCTGGCTCTGGACTGTGACTGCGCCTGGATTCTGCCATTGCGACACATTTTGT
TGCCTTTTCAGCCCCCTGGTGTCTGCAGTGGGGGATTTAAGGCACCCGCTTCCACTTCTTTCTGTTTGGAGTTTTC
TGTGGAACCGCCGGCGTTGGCTCCGAAGACTTAGCGACGCCACTGGCGGCACCTTCTCCTGCGCCAGTGATGT
TTCCACGGTGCCTGTACACAGCCGAGCAGCATTTCCGTTGAAGGACTTGATCCCCATTGCGGGCAGTGCTGGAC
GTGTCCCGGAGACCCACCGGGAGGGCGCCGCCATGCCTTGTACCCCCACCGTGACAGGTGTGGCCGGTTTTCTCC
GCAGGTTGAACATGGAAATAAAAGCAAACCTTGTATG

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FIGURE 2168

GTCCGAGCGACCGGCTTGGCGCCTGCCTGTCCCCAGCCCCCTCTCAGCTTGAACTCCTTCCTTCAAGTCTGGGCC
TCGAGGCTTCCAGAGCGGCCTCCAGGGGTGCAGTCTCAGTTCCCCACGCCAGCCGTCTCCGTCTCCGCCTCCTC
CGGGCCTGGCAGGTGGCACTGTCCGGAGGCGGAGCCTTGGGCGAGGGGTGGTTGCGGCGGAGGACGCAACCGAGC
GGGCTGCGGCCTCACCATGGACCCAGAATGCGCCAGCTGCTCCCGCTCTCTGTGCTGTTCTGGTAGATCCCA
GGCAGCCGGTGGCAGATGACACCTGTTTGGAGAAGCTCCTGGACTGGTTTAAAACGGTCACTGAAGGAGAGTCCA
GTGTCGTGCTGCTGCAGGAGCACCCCTGCCTGGTGGAGCTGCTGTCCC**ATCT**GCTGAAAGTCCAGGACCTGAGTT
CTGGGGTCTCTCCTTCTCACTGCGCCTGGCAGGAACCTTCGCAGCCCAGGAAAACCTGCTTCCAGTATCTTCAGG
TGCGGTGCACACCATCTTCTCCCTGCAGGGAGACTCCAGCCTGTTTGTGGCCTCGGCGGCCAGTCAGCTCCTGGT
GCACGTCTGGCTTTGTCCATGCGAGGTGGAGCCGAGGGGCAGCCCTGCCTGCCGGGGGGGTGACTGGCCCGCGTG
TGCCCAAGAATCATGGATCACGTTGAAGAGTCTTGTGCTCCGCGGCCACCCCAAGGTCACTCAGGCCCTGAA
CGTCTGACCACGACCTTCGGGCGCTGCCAGAGCCCCTGGACGGAAGCCCTGTGGGTGCGGCTGAGTCCCGCGCT
GGCCTGTCTGCTGGAGAGAGACCCCATCCCCGCCGACACTCGTTTCGTGGACCTGCTTCTCTGTGTGGCTCGTTC
TCCCGTGTTCAGTTCTTCCGACGGCAGCCTGTGGGAGACAGTGGCGCGGGCTCTGAGCTGCCTGGGTCCCACCCA
CATGGGACCCCTGGCTTTGGGGATCCTGAAGCTCGAGCACTGTCCACAGGCACTGAGGACCCAGGCCTTCCAGGT
CCTTCTCCAGCCCCCTGGCCTGTGTCTGAAGGCCACGTTTCAAGCCCCCGACCCCAAGGCTTGTGGACGGGAC
GGCAGACGATGCCACGACGGTGGACACACTCCTGGCCTCCAAGTCGTCTGCGCCGGCCTCCTGTGCCGCACCCCT
GGCTCACCTGAGCTGCAGCGCTGCAGCCGCTGCCCCAGCGCCCTTACCGTGGCCCCAGGCGTCTCTACTGGGGGCTAC
AGTGACTGTCTGCGGCTCTGTGACGGCTCGGCTGCCCCCTGCCTCCAGTGTGGGGGGCCACCTCTGTGGGACCCT
GGCGGGCTGCGTCCGGGTCCAGCGAGCAGCCCTCGACTTCCCTGGGGACGCTGTACAGGGGACAGGCCCCCAGGA
GCTGGTGACGACGGCGCTTGCTGTCTCCTCTGAGTGCCTCGAGAGCCCCGGCTCCAGCCCCACGGTTCTGAAGAA
GGCCTTCCAGGCCACGCTCAGGTGGCTCCTGACTCACCAAGACCCCCGGCTGCTCTGATCTCGSCCCCTCAT
CCCGCAGTTCTCAGAGAGCTGTTCCCTGTGCTGCAGAAACGCTGTGCCACCCCTGCTGGGAGGTGAGGGACTC
CGCCCTCGAGTTCTTGACCCAGCTGAGCAGGCACTGGGGAGGACAGGCTGACTTCAGATGCGCACTCTTGGCTTC
AGAGGTGCCTCAGCTGGCCCTGCAGCTCCTCCAGGACCTGAGAGTTATGTCCGAGCGAGTGCAGTGACCGCCAT
GGGGCAGCTGTCCAGCCAGGGCCTGCACGCCCCCACCAGCCCTGAGCATGCAGAGGCCCGGCAGAGCCTGTTCTCT
GGAGCTCCTGCACATCCTCTCCGTAGACTCGGAGGGCTTCCACGGCGGGCGGTCATGCAAGTCTTCACTGAGTG
GCTGCGGGACGGCCACGCCGACGCGGCCAGGACACGGAGCAGTTCGTGGCCACTGTGCTGCAGGCGGCGAGCCG
AGACCTGGACTGGGAGGTCCGCGCCCAGGGCCTGGAGCTGGCCCTCGTGTCTCTGGGCCAGACTTTGGGGCCGCC
GCGTACCCACTGCCCCATGCGCGTGGCCGTACCCGAGGTGGCCCCAGCCAGCCACTCACCGAGGCACTGAGGGC
TCTCTGCCACGTGGGGCTCTTTGACTTCGCCCTTTTGTGCCTTGTGTTGACTGCGACCGCCCTGTGGCGCAGAAGTC
TTGTGACCTCCTTCTCTTCTGAGGGACAAGATTGCTTCTACAGCAGCCTGCGGGAGGCCAGGGGCAGCCCCAA
CACTGCCTCCGAGAGGCCACCCCTGCCGAGGTGGCGGGCGGGTGAGCAGGCCAGCCCCAGGGGACCAGGAGCC
TGAGGCTGTGCTGGCCATGCTCAGGTCCCTAGACCTGGAGGGCCTGCGGAGCACGCTGGCCGAGAGCAGCGACCA
CGTGAAAAGAGTCCCCAGTCCCTCCTGCAGGACATGCTGGCCACGGGAGGCTTCTGCGAGGGGACGAGGCCGA
CTGCTACTGAGCAGAACCAGAGTCTGCCACTGGGGCTCAGGACCAAGGGAGGCAGCACCATGTCTTCTGTGGGA
CACTGCCAGCCCCAGGGCTCCAGCCCAGCCCGGTGGATCCTCTGGGGAAGCCAGGACCAGGAGAGAAGCAAGGTC
AAGAAATCCCACAGTTTGATGTATTAAAGAAATGACTTATTTCTACTCAAAATAAATGGCATTGAAGTCTTTCTT
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FIGURE 2169

MRGGAEGQPCLPGGDWPACAQKIMDHVEESLCSAATPKVTQALNVLTTFGRCQSPWTEALWVRLSPRVACLLER
DPIPAAHSFVDLLLCVARSPVFSSSDGSLWETVARALSCLGPTHMGPLALGILKLEHCPQALRTQAFQVLLQPLA
CVLKATVQAPGPPGLLDGTADDATTVDITLLASKSSCAGLLCRTLAHLEELQPLPQRPSPWPQASLLGATVTVLRL
CDGSAAPASSVGGHLCGTLAGCVRVQRAALDFLGTLGQGTGPQELVTQALAVLLECLESPGSSPTVLKKAQATL
RWLLSSPKTPGCSDLGPLIPQFLRELFPVLQKRLCHPCWEVRDSALEFLTQLSRHWGGQADFRCALLASEVPQLA
LQLLQDPESYVRASAVTAMGQLSSQGLHAPTSPHEAEARQSLFLELLHILSVDSSEGFPRRAVMQVFTEWLRDGH
DAAQDTEQFVATVLQAASRDLDWEVRAQGLELALVFLGQTLGPPRTHCPYAVALPEVAPAQPLTEALRALCHVGL
FDFAFCALFDCDRPVAQKSCDLLLFLRDKIASYSSLREARGSPNTASAEATLPRWRAGEQAQPPGDQEPEAVLAM
LRSLDLEGLRSTLAESSDHVEKSPQSLLQDMLATGGFLQGDEADCY

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FIGURE 2170A

GGCGGCCGAGCGGAGCCGAGCGCAGCCGAGCCGGGCGGAGCCGGGCGGGCCGAGGAGCGCGCGGATGAT
GCGGGCGGCCAGGCGGGGGTTCGACGGGTCCCTGAAGCCCCGCGCCCCGGGCCAGCAAGGGAGCCCCGCGCAGGCCG
CGCGCATCCGGAGGCGGCCGGGCCCCGCCATGCGCGGGGTTCAGCTACGCGGCGCCCTGGTGGGTGAGCCTCCTGC
ACCGGCTGCCCCACTTCGACCTGAGCTGGGAGGCCACTAGCAGCCAGTTCCGGCCCCGAGGACACCGACTACCAGC
AGGCCCTGCTGCTCCTGGGGGCCGCCGCCCTGGCCTGCCTCGCCCTGGACCTCCTCTTCTGCTCTTCTACTCCT
TCTGGCTGTGCTGCCGGCGGCGCAAGAGCGAGGAGCACCTGGACGCCGACTGCTGCTGCACGGCCTGGTGTGTCA
TCATCGCCACGCTGGTGTGCAGCGCCGGCATCGCAGTGGGATTCTACGGCAACGGGGAGACCAGTGATGGCATCC
ATAGGGCCACCTACTCGCTCCGCCACGCCAACCGCACGGTGGCCGGGGTCCAGGACCGCGTGTGGGACACGGCGG
TGGGGCTGAACCACACGGCGGAGCCAGCCTGCAGACCCTGGAGCGGCAGCTGGCCGGGCGGCCGAGCCCCCTGC
GAGCCGTACAGAGGCTGCAGGGCCTGCTGGAGACGCTGCTGGGCTACACGGCCGCCATCCCCCTTTTGGAGGAACA
CGGCGGTGCTCGCTGGAGGTGCTGGCGGAGCAGGTGGATCTCTACGACTGGTACAGGGTCTGCCTGCTGGGAGTCC
TGGCCCTGGTTCATCAGCTGGGGCGCGCTGGGCTTGGAGCTGGCTGTGTCCGTGGGCTCCAGCGACTTCTGTGTGG
ACCCTGACGCTACGTGACCAAAATGGTGGAGGAGTACTCGGTGCTGAGTGGGGACATCCTGCAGTACTACCTGG
CCTGCTCGCCCCGCGCCGCCAACCCCTTCCAGCAGAAGCTGTGGGCAGCCACAAGGCACTGGTGGAGATGCAGG
ATGTGCTGGCTGAGCTTCTGAGGACCGTCCCCTGGGAGCAGCCGGCCACTAAGGACCCCCCTCCTCCGCGTCCAGG
AGGTGCTGAATGGCACGGAGGTGAACCTGCAGCACCTCACCGCCCTGGTGGACTGCCGCAGCCTGCATCTGGACT
ACGTGCAAGCGCTGACCGGCTTCTGCTATGACGGCGTGGAGGGCCTCATCTACCTGGCCCTCTTCTCCTTCGTCA
CAGCCCTCATGTTAGCTCCATCGTCTGCAGCGTCCCGCACACCTGGCAGCAAAAGAGAGGCCCTGATGAGGACG
GGGAGGAGGAGGCCGCTCCAGGGCCGCGGCAGGCGCACGACAGCCTCTACCGCGTCCACATGCCAGCCTGTACA
GCTGTGGCAGCAGCTACGGCAGTGAGACCAGCATCCCGGCCGCGGCCACACCGTCAGCAACGCCCGGTCAGTG
AGTACATGAGCCAGAACGCTAATTTCCAGAACCCCCGCTGTGAGAACACCCCACTCATTTGGGCGCGAGTCCCCGC
CGCCCTCATACACCTCCAGCATGAGAGCCAAATACCTCGCCACGAGCCAGCCTCGCCCTGACTCCAGCGGCAGCC
ACTAGACCGCGCCCCGGCAGCCACCCACCCACGTCGCAACTTCCCCTCCCCTGCCAGCACTGCCGCTTCCACCT
GGGCCACCCACCGGACCCCTCGCACGCCGTGCCAGGCCTGCCCCAGACGCGTCTGCAGGCCGCTTGGCCCTCTGTC
CCCTCCCCCGCAGGGGACAGTGGAGACGCAGGGGCTCTGGGCGCCGTACCGCCAACTCGGGTCACACCTGAACGCT
GCTGCCAGCCGATGCCCCAGCCCTGCACGCCACCCACTATCCCGGCACGCTCCCTCTGCAGATGGTCGCCGCACC
TACAAGCCCTGGCCGCACCCCAACCTGTGTTGTTGCCGCCGGCCCTTCCCTCCACAGCTCTCCTTCCCTCCCGCCC
GGCACTTCTGTGGACCCCTTCTTAGTTACAGGCACGGCTGGGGCCGCTCTGTGCTGGCGCCTGCTGGCCACTGA
GGGACAGGGACACGTGCCACCTGCTCATCTGCCCCGCTGAGGTACCCCGTGGTCCCTCCACGTGCCCATCTCTCT
GCAGTGCCCTCCTCGCTGTGCAGCCCGCCACCCACAGGCTCACCCCTCCTGCCGGCTGCCAGAGGCCCCCTCC
AGCAGGGCCTCTCTCCGTTGCCCCAGCTTCACTCTCTCCCTCAGCACCTGCCCTGCTGGAGGCCCCAGCCCTCCG
TGGACAGCAGGGGCCACGTGGAGCCCGGGCCGCTCACCCGCCACCCAGTGCTGGCCGCTTCTTGGTGCCAAACC
CCCTTCCCCCACCCAGAGACTGGGCAGCTGTGTCTGGTTCGTTCTTTGCACTAACCAATTTGTCACTCTTAGGG
CAGGCTGGGGCTGCGGGCTGAGGGGGACCGCTGGCACCCCCCTTCCCTCCCTTCTTGGTTCCATTTCCATCCATG
ACAGGTACAGCATCCAGGAGCCCGGCTGAGGGGCTGGACCCGAGCCGGCTGTGAACATCCCTCAGCCCCCTGCT
GTCCCCCTTGGGACTAACCCTAACCTACCCCCAACTCCACGGGTGCCCTAGCTGGCCCAGAGCCGGCAGT
GTGAGCCCAAGTCCGGGCTGGAGCCGAGGCCGAGCAGCTGTCTGGGAGTCAAGGCTGCAGTAGCGTTTCTTCAT
GGGGTGTCCAGGGGGTGCCACAGACCAGAGGCAGCCCAAGGGCCTGGACACCCCTCCCCAGGCAGGTGCTGCC
CCAGGAGGACTGTCTCGGGAATGAACCTCCCGGGGCTTTGGACTGAGGTCCCTGTGGCCTCGGTCTCCTCCCC
ATGAAGTGGGAGCGAGGCTCCCCAATGGTGCTTTTGCTTTAGTGATGATGTTTGCTGTGCTTCCCGCCGTGGA
GGGCAGAGCCACCCACATCAGGATCGGACGTGCTACCCCTCCCGGTCCCGGCCCTGGCCCAGCCAGCCAGCCC
TCGAGGCTCGATGCCTGTGCCAAGGCCAGGGGAGCCAGAGGGCAGCTGGATGGCCACGTGCAGGGGTCAAGGCT
GGGCCCTGCAGTGGGGCGGGGCCGAGCCCCAGCAGTTTACAGACGCATGGCTCTTCTCCAGAGCAGCCGGCA
GCTACCTGGACCGGAAATGTCTCATCCCCCTCCCTGGGGCCAGGCTCTGCCCTGGCCTTCTCTGTGAACCCCTC
CTTTCTTTGTGCTGGTGTCTGGGACCAAAAAGGGGAATATGGGAGGGCAGAGTGGGGAGGGAGTCCATGGGCC
TGGGGCCCCAAGCCGGGGCTGTGAGCTCCCAGGCATGACCAAACTCAGTGGAGGGGCTCTGCTTCAGGCC
CGCCTGGCTGACATTCTGAGCCCCCTCGGAGGCCCGCCACAGCCAACTGCCAGTCTTTCTCTGGGCTTGA
CCCGCCAGGGGAGTTCTCCAGGCCTAGGGCCAGGAGAGAGGCCCTGGCACCTGGCGTGGGTGCCCGCCAAACGC

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FIGURE 2170B

CCTGCGACCGCTCAGAAGCACAAATGCTGTCCATGGCCGTGAGGCTGCCTGCCAGGTGAATGGACATAGCGTGAG
AGGCGGTGAGGCCAGGGCTTCCAGCCTCGTGCTGTCTCGGGACTCCTGACCGTGGTGTGCGTGTGTGCCCCGTCTG
TGACTTTCTACTCACCAAGGTTGAAGAAAGGAAACGGGGAAAATCAAAAGGGGTTCAAACCCACCTCAGTAGGT
GGAGGGGAGCGCCTGCCATTGGTTGTATTTTTGTTCGTAGTTTTCGGTGCCGTGTTCTTAATACTACTCCATCCCAT
GACCTCGCCACACCTACTGGGGCATCTGGCTGGTGCCCTGCTGCCATGGCCAGCCCCACTCTCACCTGCACAGG
GGGTCTTGCAGCCCCCAGGCCACAGCCTCGTTGGGAGGACAGGGTGGCCCTGGGGACAAGAGGGAGGAGCCCAG
GGGCTTACCTCACTGAGAGTGTCTCCAGCAGGCATCCACTACCCAGGGCCCCCACATGTCATGGCAAGGTTG
GTAGTGAATGGGCCTGGTTGGGAGCAGCCCCTGGCCCATTGCCACCCACCCATCTCACTATGCAATTCGAGTTC
CAAGCAACATTTGCTCCTGCCCTGGGGCCAGCTCTGCCCCAGCCCTGAGAGGGGTGGTGAGGCAGCCCCCTGGAC
CCCAGAACCCAGACAAGGGGGCAGGCGGGGGACCAGGGCCTCTCCTGTGGGATCTTTGTTTTGTGTTTAACCAT
AATGGTTGTGTACTGAACCACTTCATATTTGTTATATATAATATATATATATAATCTCCTTAAGACTCAGCCT
CCTGGTTTACCCCCCGGCCCTGGGCATCTGACCTCCCCACCCAGTGTGATTTAACATCCAGGAAGTGAAGCCT
GAACCATTTTGCATTTCCCCCTCCTCCAGCCTCTGTAGGGCCATGGCTGTATGTACTGTCGCTGTGTTTTTTGT
TTTTTTAGAACTGGGTTTGGGGGCTGATTTTTATTCTTTGGGGGCTTTTTTCTTGGCAAATACTAAAAATCTC
GTCAATGTAATTTCTGTGGTTTCTATTACGCTTGGGTTTCATGTTTTAAATAAATTTTAAAAAGC

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FIGURE 2171

MAGVSYAAPWWVSLHRLPHFDLSWEATSSQFRPEDTDYQQALLLLGAAALACLALDLLFLFYFWLCCRRRKS
EEHLDADCCCTAWCVIIATLVCSAGIAVGFGNGETSDGIHRATYSLRHANRTVAGVQDRVWDTAVGLNHTAEP
LQTLERQLAGRPEPLRAVQRLQGLLETLLGYTAAIPFWRNTAVSLEVLAEQVDLYDWYRVCLLGV LALVISW
GLELAVSVGSSDFCVDPDAYVTMVEEYSVLSGDILQYYLACSPRAANPFQKLSGSHKALVEMQDVVAELLRTV
PWEQPATKDPLLRVQEVNLNGTEVNLQHLTALVDCRSLHLDYVQALTGFCYDGVGLIYLLALFSFVTALMFSSIVC
SVPHTWQKRGPDDEGEEEAAPGPRQAHDLSLYRVHMPSLYSCGSSYGETSIPAAAHTVSNAPVTEYMSQANANFQ
NPRCENTPLIGRESPPPSYTSSMRAYLATSQPRPDSSGSH

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FIGURE 2172

ACAGAACAGAGAGAAAGGAACCTTTGTCTTTCGTGTGAATGCTCGTGAGGGGCCATCCTTAGAGTGGAAATGCTC
CTGAGGGCTCCAGCGAATCAAGACCCCTCAGACCCCCGGGCTGTCCCCACCCCATGACCACATGTTCCGCAGGCACC
CTCAGCGCTGTGCCCTGCGTGTGCGCCAGGCAGGTGTTTGTGTTTTGAGCGCAGATTCTGCCTGTGGCATAGCCAT
GTGGAGATGTTACGCATGTACTTCCCTTTGTGATTTTCAGCCGATACGGAAGATGTGTGCATTGTAGAGAGATTG
TTCTCCAGCAGCCTAGTGGCCATCGTGAGCCTTAAAGCACCAAGGAAGCTAAAGGTTTGCCACTTTAAGAAGGGA
ACTGAGATCTGCAACTACAGCTACTCCAACACGATTCTGGCTGTGAAGCTCAACAGGCAGAGGCTGATAGTATGC
CTGGAGGAGTCCCTGTACATCCACAACATTCGGGACATGAAGGTGCTGCATACGATCAGGGAGACGCCTCCAAAC
CCTGCAGGCCTGTGTGCGCTGTCAATCAACAACGACAACCTGCTACTTGGCGTACCCAGGGAGCGCGACCATCGGA
GAGGTGCAGGTCTTCGATACCATTAAATTTGAGAGCTGCAAAACATGATTCCGGCTCACGACAGTCCTTTAGCGGCA
CTGGCCTTTGACGCAAGTGGAATAAACTTGCCACGGCTTCGGAGAAGGGGACCGTGATTAGGGTATTTTCCATT
CCAGAAGGACAAAACTCTTTGAGTTTCGGAGAGGAGTAAAGAGGTGCGTGAGCATCTGCTCCCTGGCCTTCAGC
ATGGACGGCATGTTCTCTCCGCCTCCAGCAACACTGAGACCGTGACATCTTCAAACCTCGAGACTGTGAAAGAA
AAACCCCCAGAGGAGCCACACCTGGACCGGGTACTTCGGGAAAGTGCTCATGGCCTCCACCAGCTACCTGCCT
TCCCAAGTGACAGAAATGTTCAACCAGGGCAGAGCTTTCGCCACGGTCCGCCTGCCATTCTGCGGCCACAAAAAC
ATCTGCTCGCTAGCCACAATTCAGAAGATCCCGCGGTTGTTGGTGGGTGCCGCCGACGGGTACCTGTACATGTAC
AACCTGGACCCCCAGGAGGGCGGCGAGTGTGCCCTGATGAAGCAGCACCGGCTGGACGGCAGTCTGAAAACGACC
AATGAGATCTTGACTCTGCCTCTCACGACTGCCCCTTAGTCACTCAGACATACGGCGCAGCTGCAGGAAAAGCC
TACACAGACGACCTGGGTGCTGTGGGTGGCGCCTGCCTGGAGGACGAGGCCAGCGCCCTGCGCCTGGATGAGGAC
AGCGAGCACCCGCCCATGATTCTTCGGAAGTGAACCTTGACCTGTGACCTCTGACCCGGGGAGCAGAGAACAC
TGGCTTCACAGAGGACTTTGTGCATTGCTGCTATGAACCTTGACCTGAGTCGGGGGAGAGGATGGCAGAGACTTT
ATT

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FIGURE 2173

MLLRLQRIKTLRPPGCPHPMTTCSAGTLSAVPCVSPRQVFVFERRFCLWHSVEMFTHVLPFVISADTEDVCIVE
RLFSSSLVAIVSLKAPRKLKVCHFKKGTEICNYSYSNTILAVKLNRLIVCLEESLYIHNIIDMKVLHTIRETP
PNPAGLCALSINNDNCYLAYPGSATIGEVQVFDITNLRAANMIPAHDSPLAALAFDASGTKLATASEKGTVIRVF
SIPEGQKLFEFRRGVKRCVSICSLAFSMDGMFLSASSNTETVHIFKLETVKEKPPEEPTTWGYFGKVLMASTSY
LPSQVTEMFNQGRAFATVRLPFCGHKNICSLATIQIPRLLVGAADGYLYMYNLDPQEGGECALMKQHRDGLK
TTNEILDSASHDCPLVTQTYGAAAGKAYTDDLGA VGGACLEDEASALRLDEDESEHPPMILRTD

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FIGURE 2174

CGCGTCCGCCCCGCGAGCACAGAGCCTCGCCTTTGCCGATCCGCCGCCCGTCCACACCCGCCGCCAGCTCACCAT
GGATGATGATATCGCCGCGCTCGTCGTGACAAACGGCTCCGGCATGTGCAAGGCCGGCTTCGCGGGCGACGATGC
CCCCCGGGCGCTCTTCCCCTCCATCGTGGGGCGCCCCAGGCACCAGGGCGTGATGGTGGGCATGGGTGAGAAGGA
TTCTATGTGGGCGACGAGGCCAGAGCAAGAGAGGCATCCTCACCCTGAAGTACCCCATCGAGCACGGCATCGT
CACCAACTGGGACGACATGGAGAAAATCTGGCACCACACCTTCTACAATGAGCTGCGTGTGGCTCCCGAGGAGCA
CCCCGTGCTGCTGACCGAGGCCCCCTGAACCCCAAGGCCAACCGCGAGAAGATGACCCAGATCATGTTTGAGAC
CTTCAACACCCCAGCCATGTACGTTGCTATCCAGGCTGTGCTATCCCTGTACGCCTCTGGCCGTACCACTGGCAT
CGTGATGGACTCCGGTGACGGGGTCACCCACACTGTGCCATCTACGAGGGGTATGCCCTCCCCATGCCATCCT
GCGTCTGGACCTGGCTGGCCGGGACCTGACTGACTACCTCATGAAGATCCTCACCAGCGCGGCTACAGCTTCAC
CACCACGGCCGAGCGGGAAATCGTGCGTGACATTAAGGAGAAGCTGTGCTACGTGCCCCTGGACTTCGAGCAAGA
GATGGCCACGGCTGCTTCCAGCTCCTCCCTGGAGAAGAGCTACGAGCTGCCTGACGGCCAGGTCATCACCATTGG
CAATGAGCGGTTCCGCTGCCC TGAGGCACTCTTCCAGCCTTCCTTCCTGGGCATGGAGTCCGTGTGGCATCCACGA
AACTACCTTCAACTCCATCATGAAGTGTGACGTGGACATCCGCAAAGACCTGTACGCCAACACAGTGCTGTCTGG
CGGCACCACCATGTACCCTGGCATTGCCGACAGGATGCAGAAGGAGATCACTGCCCTGGCACCACAGCAATGAA
GATCAAGATCATTGCTCCTCCTGAGCGCAAGTACTCCGTGTGGATCGGCGGCTCCATCCTGGCCTCGCTGTCCAC
CTTCCAGCAGATGTGGATCAGCAAGCAGGAGTATGACGAGTCCGGCCCCCTCCATCGTCCACC GCAAATGCTTCTTA
GGCGGACTATGACTTAGTTGCGTTACACCCTTTCTTGACAAAACCTAACTTGCGCAGAAAACAAGATGAGATTGG
CATGGCTTTATTTGTTTTTTTTTGTGTTTTGTTTTGTTTTTTTTTTTTTTTTTTGGCTTGACTCAGGATTTAAAACTG
GAACGGTGAAGGTGACAGCAGTCGGTTGGAGCGAGCATCCCCAAAGTTCACAATGTGGCCGAGGACTTTGATTG
CACATTGTTGTTTTTTTTTAATAGTCATTCCAAATATGAGATGCATTGTTACAGGAAGTCCCTTGCCATCCTAAAAG
CCACCCCACTTCTCTCTAAGGAGAATGGCCAGTCCTCTCCCAAGTCCACACAGGGGAGGTGATAGCATTGCTTT
CGTGTAATTATGTAATGCAAAATTTTTTAACTTTCGCCTTAATACTTTTTTATTTTGTGTTTTATTTTGAATGAT
GAGCCTTCGTGCCCCCCTTCCCCCTTTTTGTCCCCAACTTGAGATGTATGAAGGCTTTTGGTCTCCCTGGGAG
TGGGTGGAGGCAGCCAGGGCTTACCTGTACACTGACTTGAGACCAGTTGAATAAAAGTGCACACCTTA

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FIGURE 2175

MDDDIAALVVDNGSGMCKAGFAGDDAPRAVFPSIVGRPRHQGVMVGMGQKDSYVGDEAQSKRGILTLKYPIEHGI
VTNWDDMEKIWHHTFYNELRVAPEEHPVLLTEAPLNPKANREKMTQIMFETFNTPAMYVAIQAVLSLYASGRITG
IVMDSGDGVHTVPIYEGYALPHAILRLDLAGRDLDYLMKILTERGYSFTTTAEREIVRDIKEKLCYVALDFEQ
EMATAASSSSLEKSYELPDGQVITIGNERFRCPEALFQPSFLGMESCGIHETTFNSIMKCDVDIRKDLYANTVLS
GGTMYPGIADRMQKEITALAPSTMKIKIIAPPERKYSVWIGGSILASLSTFQQMWISKQEYDESGPSIVHRKCF

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FIGURE 2176

GCGGAGGGTGCGTGCGGGCCGCGGCAGCCGAACAAAGGAGCAGGGGCGCCGCCGAGGGACCCGCCACCCACCTC
CCGGGGCCGCGCAGCGGCCTCTCGTCTACTGCCACCATGACCGCCAACGGCACAGCCGAGGCGGTGCAGATCCAG
TTCGGCCTCATCAACTGCGGCAACAAGTACCTGACGGCCGAGGCGTTCGGGTCAAGGTGAACGCGTCCGCCAGC
AGCCTGAAGAAGAAGCAGATCTGGACGCTGGAGCAGCCCCCTGACGAGGCGGGCAGCGCGGCCGTGTGCCTGCGC
AGCCACCTGGGCGCGCTACCTGGCGGGCGGACAAGGACGGCAACGTGACCTGCGAGCGCGAGGTGCCGGGTCCCGAC
TGCCGTTTCTCATCTGTTGGCGCACGACGACGGTCGCTGGTTCGCTGACGTCCGAGGCGCACCGGCGCTACTTCGGC
GGCACCGAGGACCGCCTGTCTGTCTTCGCGCAGACGGTGTCCCCCGCCGAGAAGTGGAGCGTGCACATCGCCATG
CACCTCAGGTCAACATCTACAGTGTACCCGTAAGCGCTACGCGCACCTGAGCGCGCGGGCCGGCCGACGAGATC
GCCGTGGACCGCGACGTGCCCTGGGGCGTCGACTCGCTCATCACCTCGCCTTCAGGACCAGCGCTACAGCGTG
CAGACCGCCGACCACCGCTTCTGCGCCACGACGGGCGCTGGTGGCGCGCCCGAGCCGGCCACTGGCTACACG
CTGGAGTTCCGCTCCGGCAAGGTGGCCTTCCGCGACTGCGAGGGCCGTACCTGGCGCCGTCCGGGGCCAGCGGC
ACGCTCAAGGCGGGCAAGGCCACCAAGGTGGGCAAGGACGAGCTCTTTGCTCTGGAGCAGAGCTGCGCCCAAGTC
GTGCTGCAGGCGGGCAACGAGAGGAACGTGTCACGCGCCAGGGTATGGACCTGTCTGCCAATCAGGACGAGGAG
ACCGACCAGGAGACCTTCCAGCTGGAGATCGACCGCGACACCAAAAAGTGTGCCTTCCGTACCCACACGGGCAAG
TACTGGACGCTGACGGCCACCGGGGGCGTGCAGTCCACCGCCTCCAGCAAGAATGCCAGCTGCTACTTTGACATC
GAGTGGCGTGACCGGCGCATCACACTGAGGGCGTCCAATGGCAAGTTTGTGACCTCCAAGAAGAATGGGCAGCTG
GCCGCTCTCGGTGGAGACAGCAGGGGACTCAGAGCTTCTCTCATGAAGCTCATCAACCGCCCCATCATCGTGTTC
CGCGGGGAGCATGGCTTCATCGGCTGCCGCAAGGTACGGGGACCCCTGGACGCCAACCGCTCCAGCTATGACGTC
TTCCAGCTGGAGTTCAACGATGGCGCCTACAACATCAAAGACTCCACAGGCAAATACTGGACGGTGGGCAGTGAC
TCCGCGGTACACAGCAGCGGCGACACTCCTGTGGACTTCTTCTTCGAGTTCGCGACTATAACAAGGTGGCCATC
AAGGTGGGCGGGCGCTACCTGAAGGGCGACACGCGAGGCGTCTGAAGGCTCGGGCGGAAACCGTGGACCCCGCC
TCGCTCTGGGAGTACTAGGGCCGCGCCGCTTCCCTCCCGCCCCCTGCCACATGGCGGCTCCTGCCAACCCCTCCCTG
CTAACCCCTTCTCCGCCAGGTGGGCTCCAGGGCGGGAGGCAAGCCCCCTTGCCTTTCAAACCTGGAAACCCAGAG
AAAACGGTGCCCCACCTGTGCCCCCTATGGACTCCCCACTCTCCCCCTCCGCCCGGGTTCCCTACTCCCTCGGG
TCAGCGGCTGCGGCCTGGCCC'TGGGAGGGATTTAGATGCCCTGCCCTCTTGTCTGCCACGGGGCGAGTCTGGC
ACCTCTTTCTTCTGACCTCAGACGGCTCTGAGCCTTATTTCTCTGGAAGCGGCTAAGGGACGGTTGGGGGCTGGG
AGCCCTGGGCGTGTAGTGTAACTGGAATCTTTTGCTCTCCCAGCCACCTCCTCCCAGCCCCCAGGAGAGCTGG
GCACATGTCCCAAGCCTGTCTAGTGGCCCTCCCTGGTGCAGTGTCCCCGAAACCCCTGCTTGGGAAGGGAAGCTGT
CGGGAGGGCTAGGACTGACCCTTGTGGTGTTTTTTTGGGTGGTGGCTGGAAACAGCCCCCTCTCCACGTGGGAGA
GGCTCAGCCTGGCTCCCTTCCCTGGAGCGGCAGGGCGTGACGGCCACAGGGTCTGCCGCTGCACGTTCTGCCAA
GGTGGTGGTGGCGGGCGGGTAGGGGTGTGGGGGCGCTCTTCTCCTGTCTCTTCTTTTACCCTAGCCTGACTG
GAAGCAGAAAATGACCAAATCAGTATTTTTTTTAAATGAAATATTATTGCTGGAGGCGTCCAGGCAAGCCTGGCT
GTAGTAGCGAGTGATCTGGCGGGGGGCGTCTCAGCACCCCTCCCCAGGGGGTGATCTCAGCCCCCTCTTTCCGTC
CTTCCCGTCCAGCCCCAGCCCTGGGCTGGGCTGCCGACACCTGGGCCAGAGCCCCCTGCTGTGATTGGTGTCTCC
TGGGCTCTCCCGGTGGATGAAGCCAGGCGTCGCCCCCTCCGGGAGCCCTGGGGTGAGCCGCCGGGGCCCCCTGC
TGCCAGCCTCCCCCGTCCCCAATGCATCTCACTCTGGGTGTCTTGGTCTTTTATTTTGTAAAGTGTCAATTG
TATAACTCTAAACGCCCATGATAGTAGCTTCAAACCTGGAAATAGCGAAATAAAATAACTCAGTCTGC

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FIGURE 2177

MTANGTAEAVQIQFGLINCGNKYLTAFAFGFKVNASASSLKKKQIWTLEQPPDEAGSAAVCLRSHLGRYLAADKD
GNVTCEREVPGPDCRFLIVAHDDGRWSLQSEAHRRYFGGTEDRLSCFAQTVSPA EKWSVHIAMHPQVNIYSVTRK
RYAHL SARP ADEIAVDRDVPWGVDSLITLAFQDQRYSVQTADHRFLRHDGRLVARPEPATGYTLEFRSGKVAFRD
CEGRYLAPSGPSGTLKAGKATKVGKDELFALEQSCAQVVLQAANERNVSTRQGMDLSANQDEETDQETFQLEIDR
DTKKCAFRTHTGKYWTLTATGGVQSTASSKNASCYFDIEWRDRRITLRASNGKFVTSKKNQQLAASVETAGDSEL
FLMKLINRPIIVFRGEHGFIGCRKVTGTLDANRSSYDVFQLEFNDGAYNIKDSTGKYWTVGSDSAVTSSGDTPVD
FFFEFCDYNKVAIKVGGRYLKGDHAGVLKASAETVDPASLWEY

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FIGURE 2178

CCGAACGCCCGCAGCAGGGTCAGAAGGGAGGTGGCCGGTCTCCGTCGTGACCTCTGACGGTTTCTGAGCGTTGGC
CTTTGGCACGCGCTACACCCTTTTGCTTTGGTTCTGCCATGCCGATGTACCAGGTAAAGCCCTATCACGGGGGCG
GCGCGCCTCTCCGTGTGGAGCTTCCCACCTGCATGTACCGGCTCCCCAACGTGCACGGCAGGAGCTACGGCCCAG
CGCCGGGCGCTGGCCACGTGCAGGAAGAGTCTAACCTGTCTCTGCAAGCTCTTGAGTCCCGCCAAGATGATATTT
TAAAACGTCTGTATGAGTTGAAAGCTGCAGTTGATGGCCTCTCCAAGATGATTCAAACACCAGATGCAGACTTGG
ATGTAACCAACATAATCCAAGCGGATGAGCCCACGACTTTAACCACCAATGCGCTGGACTTGAATTCAGTGCTTG
GGAAGGATTACGGGGCGCTGAAAGACATCGTGATCAACGCAAACCCGGCCTCCCCCTCCCCTCTCCCTGCTTGTGC
TGCACAGGCTGCTCTGTGAGCACTTCAGGGTCCGTGCCACGGTGCACACGCACTCCTCGGTCAAGAGCGTGCCTG
AAAACCTTCTCAAGTGCTTTGGAGAACAGAATAAAAAACAGCCCCGCCAAGACTATCAGCTGGGATTCACTTTAA
TTTGGAAGAATGTGCCGAAGACGCAGATGAAATTCAGCATCCAGACGATGTGCCCCATCGAAGGCGAAGGGAACA
TTGCACGTTTTCTTGTCTCTCTGTTTGGCCAGAAGCATAATGCTGTCAACGCAACCCTTATAGATAGCTGGGTAG
ATATTGCGATTTTTTCAGTTAAAAGAGGGAAGCAGTAAAGAAAAAGCCGCTGTTTTCCGCTCCATGAACTCTGCTC
TTGGGAAGAGCCCTTGGCTCGCTGGGAATGAACTCACCGTAGCAGACGTGGTGCTGTGGTCTGTACTCCAGCAGA
TCGGAGGCTGCAGTGTGACAGTGCCAGCCAATGTGCAGAGGTGGATGAGGTCTTGTAACCTGGCTCCTTTTA
ACACGGCCCTCAAGCTCCTTAAGTGAATTGCCGTAAC TGATTTTAAAGGGTTTAGATTTTAAGAATGGTGCTCTT
TCATGCCTATTATCAGTAAGGGGACTTGATTAGAGTCAGAGTCTTTTATTTAGGCCAGTTGTCAAGTGTCAAT
AAAAGCGCATCATGTAATTTA

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FIGURE 2179

MPMYQVKPYHGGGAPLRVELPTCMYRLPNVHGRSYGPAPGAGHVQEESENLSLQALESRQDDILKRLYELKAAVDG
LSKMIQTPDADLDVTNIIQADEPTTLTTNALDLNSVLGKDYGALKDIVINANPASPLSLLVLHRLLCHEFRVLS
TVHTHSSVKSVPENLLKCFGEQNKKQPRQDYQLGFTLIWKNVPKTQMKFSIQTMCPIEGEGNIARFLFSLFGQKH
NAVNATLIDSWVDIAIFQLKEGSSKEKAAVFRSMNSALGKSPWLAGNELTVADVVLWSVLQQIGGCSVTVPANVQ
RWMRSCENLAPFNTALKLLK

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FIGURE 2180

ATCGGAGTGTGGCAGTGCTGGGCTGGCCGGCGGGCTGGGCTGCGGCCCGCGCGCGGCCGGCGATCGAGGGGGGCA
ACTCCGGGGTCCGCAAGCGCGAAGAGGAGGGGCGACGGGGCTGGGGCTGTGGCTGCGCCGCGGCCATCGACTTTC
CCGCCGAGGGCCCCGACCCCGAATATGACGAATCTGATGTTCCAGCAGAAATCCAGGTGTTAAAGAACCCTTAC
AACAGCCAACCTTCCCTTTTGAGTTGCAAACCAACTCTTGCTGGTTTCTTTGCTGGAGCACTTGAGCCACGTGC
ATGAACCAAACCCACTTCGTTCAAGACAGGTGTTTAAGCTACTTTGCCAGACGTTTATCAAAATGGGGCTGCTGT
CTTCTTTCAGTTGTAGTGACGAGTTTAGCTCATTGAGACTACATCACAAACAGAGCTATTACTCACTTAATGAGGT
CTGCTAAAGAGAGAGTTTCGTCAGGATCCTTGTGAGGATATTTCTCGTATCCAGAAAATCAGATCAAGGGAAGTAG
CCTTGGAAGCACAACTTCACGTTACTTAAATGAATTTGAAGAACTTGCCATCTTAGGAAAAGGTGGATACGGAA
GAGTATACAAGGTCAGGAATAAATTAGATGGTCAGTATTATGCAATAAAAAAATCCTGATTAAGGGTGCAACTA
AAACAGTTTGATGAAGGTCCTACGGGAAGTGAAGGTGCTGGCAGGTCTTCAGCACCCCAATATTGTTGGCTATC
ACACCGCGTGGATAGAACATGTTTCATGTGATTACGCCAGACAGAGCTGCCATTGAGTTGCCATCTCTGG
AAGTGCTCTCCGACCAGGAAGAGGACAGAGAGCAATGTGGTGTTAAAAATGATGAAAGTAGCAGCTCATCCATTA
TCTTTGCTGAGCCACCCAGAAAAGAAAACGCTTTGGAGAATCTGACACTGAAAATCAGAATAACAAGTCGG
TGAGTACACCAACCAATTTAGTCATAAGAGAATCTGGTGAACCTTGAGTCGACCCTGGAGCTCCAGGAAAATGGCT
TGGCTGGTTTGTCTGCCAGTTCAATTGTGGAACAGCAGCTGCCACTCAGGCGTAATCCCACCTAGAGGAGAGTT
TCACATCCACCGAAGAATCTTCCGAAGAAAATGTCAACTTTTTGGGTGAGACAGAGGCACAGTACCACCTGATGC
TGCACATCCAGATGCAGCTGTGTGAGCTCTCGCTGTGGGATTGGATAGTCGAGAGAAAACAAGCGGGGGCCGGGAGT
ATGTGGACGAGTCTGCCTGTCTTATGTTATGGCCAATGTTGCAACAAAAATTTTTCAAGAATTGGTAGAAGGTG
TGTTTTACATACATAACATGGGAATTGTGACCCGAGATCTGAAGCCAAGAAATATTTTTCTTCATGGCCCTGATC
AGCAAGTAAAAATAGGAGACTTTGGTCTGGCCTGCACAGACATCCTACAGAAGAACAACAGACTGGACCAACAGAA
ACGGGAAGAGAACACCAACACATACGTCCAGAGTGGGTACTTGTCTGTACGCTTCACCCGAACAGTTGGAAGGAT
CTGAGTATGATGCCAAGTCAGATATGTACAGCTTGGGTGTGGTCTCTGCTAGAGCTCTTTCAGCCGTTTGAACAG
AAATGGAGCGAGCAGAAGTTCTAACAGGTTTAAAGAACTGGTCAGTTGCCGGAATCCCTCCGTAAAAGGTGTCCAG
TGCAAGCCAAGTATATCCAGCACTTAACGAGAAGGAACCTCATCGCAGAGACCATCTGCCATTACAGTGTGCAGA
GTGAACTTTTCCAAAATTCTGGAATGTTAACTCACCTACAGATGAAGATAATAGAGCAAGAAAAAGAAATTG
CAGAACTAAAGAAGCAGCTAAACCTCCTTTCTCAAGACAAAGGGGTGAGGGATGACGGAAAGGATGGGGGCGTGG
GATGAAGTGGACTTAACTTTTAAGGTAGTTAACTGGAATGTAAATTTTTAATCTTTATTAGGGTATAGTTGGTA
CAATGCTTCGTTGTATTTAGTAAGCCTTTACAAGACTTGTTAAAGATGTGAGAGTGCCCCAAGCTGCCGTTCCCT
CCCTTCCTGCCCCACAAGCTCCTTTTCTGAATTTCTACCTAAATATTAACCATATGCCTAGTCTCTGAACTA
AAAACCTTGGACCTCATCCTCAATTATTTTCTCCTTTCAACTCTGTTGACCCTCTGTCTGGTCTTCTCTAGAAGG
TTCTACCGCAGAAATTGATGTGTGCTCCCTGCCCTCGTCACTGCCCAAGCCGGGCTGCACATACTCACTGGAC
TGTTCCAGTTTGGACAGCTGCCAGTCTTCTGCCCCTTTCACACTGCAGCTGAAGTTCATTACCTGAAGGACGCC
TCATCATTTTCATTCTTGGCTCCAAACCTTCTGCTGCCTCTAAGATAAAAGCTCAACTTCTTAACAGTGTACAGT
GTGCAACTTCCAACCTTTTTATCTGTTCTCTCCACCTTCACTTTAGCGTCATTCCAAAACCACACCCTTGCAAAG
CTTTGTACTCCGCACCCAGATGATCTCCAGGCAGCTCAGATCTCTTCTGCTTTTGGCCTGCACTGTTCCCCG
GTACTTCCTCCTTTATTGTAGCACTCAGCTCCCCAGCCAATCTGTACATCCCTCAGAGGCAGCGATCTGATGAAT
TGGTTTTTGAATCCAGAAAGGTCTGCCATGGAGTTGGCAGTCATCACGGTAGATGGCGTATGATTTTGCTGAA
TTTTAAATAAAATGAAAACCATAAAAAAAAAAAAAAAAAA

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FIGURE 2181

MQGGNSGVRKREEEGDGAGAVAAPPAIDFPAEGPDPEYDESDVPAEQVLKEPLQOPTFPFAVANQLLLVSLEH
LSHVHEPNPLRSRQVFKLLCQTFIKMGLLSSFTCSDEFSSRLHNNRAITHLMRSKERVVRQDPCEDISRIQKIR
SREVALEAQTSTRYLNEFEELAILGKGGYGRVYKVRNKLQDQYYAIAKKILIKGATKTVCMKVLREVKVLQHPN
IVGYHTAWIEHVHVIQPRADRAAIELPSLEVLSDQEEDREQCGVKNDSSSSSIIFAEPTPEKEKRFGESDTENQ
NNKSVKYTTNLVIRESGELESTLELQENGLAGLSASSIVEQQLPLRRNSHLEESFTSTEESEENVNVLGQTEAQ
YHMLLHIQMLCELSLWDWIVERNKRGREYVDESACPYVMANVATKIFQELVEGVFYIHNMGIVHRDLKPRNIFL
HGPDQQVKIGDFGLACTDILQKNTDWTNRNGKRTPTHTSRVGTCLYASPEQLEGSEYDAKSDMYSLGVVLELFQ
PFGTEMERAEVLTGLRTGQLPESLRKRCVPVQAKYIQHLTRRNSSQRPSAIQLLQSELFQNSGNVNLTLQMKIEQ
EKEIAELKKQLNLLSQDKGVRDDGKGGVG

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FIGURE 2182

ATGCAGGCCATCAAGTGTGTGGTGGTGGGAGACGGAGCTGTAGGTAAAACCTGCCTACTGATCAGTTACACAACC
AATGCATTTTCCTGGAGAATATATCCCTACTGTCTTTGACAATTATTCTGCCAATGTTATGGTAGATGGAAAACCG
GTGAATCTGGGCTTATGGGATACAGCTGGACAAGAAGATTATGACAGATTACGCCCCCTATCCTATCCGCAAACA
GATGTGTTCTTAATTTGCTTTTCCCTTGTGAGTCCTGCATCATTTGAAAATGTCCGTGCAAAGTGGTATCCTGAG
GTGCGGCACCACTGTCCCAACACTCCCATCATCCTAGTGGGAACTAACTTGATCTTAGGGATGATAAAGACACG
ATCGAGAACTGAAGGAGAAGAAGCTGACTCCCATCACCTATCCGCAGGGTCTAGCCATGGCTAAGGAGATTGGT
GCTGTAAAATACCTGGAGTGCTCGGCGCTCACACAGCGAGGCCTCAAGACAGTGTTTGACGAAGCGATCCGAGCA
GTCCTCTGCCCGCCTCCCGTGAAGAAGAGGAAGAGAAAATGCCTGCTGTTGTAA

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FIGURE 2183

MQAIKCVVVGDAVGKTCLLISYTTNAFPGEYIPTVFDNYSANVMVDGKPVNLGLWDTAGQEDYDRLRPLSYPQT
DVF LICFSLVSPASFENVRAKWYPEVRHHCPNTP IILVGTKLDLRDDKDTIEKLKEKKLTPITYPQGLAMAKEIG
AVKYLECSALTQRGLKTVFDEAIRAVLCPPPVKKRKRKCLLL

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FIGURE 2184

GCCGCCGCCGCCATGAACATTTTCCGGCTGACTGGGGACCTGTCCCACCTGGCGGCCATCGTCATCCTGCTGCTG
AAGATCTGGAAGACGCGCTCCTGCGCCGGTATTTCTGGGAAAAGCCAGCTTCTGTTTGCACTGGTCTTCACAACT
CGTTACCTGGATCTTTTTACTTCATTTATTTTCATTGTATAACACATCTATGAAGGTTATCTACCTTGCCCTGCTCC
TATGCCACAGTGTACCTGATCTACCTGAAATTTAAGGCAACCTACGATGGAAATCATGATACCTTCCGAGTGGAG
TTTCTGGTGGTCCCTGTGGGAGGCCTCTCATTTTTAGTTAATCACGATTTCTCTCCTCTTGAGATCCTCTGGACC
TTCTCCATCTACCTGGAGTCCGTGGCTATCCTTCCGCAGCTGTTTATGATCAGCAAGACTGGGGAGGCCGAGACC
ATCACCACCCACTACCTGTTCTTCTGGGCCTCTATCGTGCTTTGTATCTTGTCAACTGGATCTGGCGCTTCTAC
TTTGAGGGCTTCTTTGACCTCATTGCTGTGGTGGCCGGCGTAGTCCAGACCATCCTATACTGTGACTTCTTCTAC
TTGTACATTACAAAAGTACTCAAGGGAAAGAAGCTCAGTTTGCCAGCATAAAGTGCCAAAGACCATCACCAGCATC
TGTCCTTCAGGGTGCTCGGACAGAATTCTTACCACAGCAAAGGCATAAGATGCTTGATACGGAAAAATCAGAACT
TAACTCTTTTGTTCAGATAGTCATCAGTGGCTCTGTAAAAACGCAGAGGAAAAAGGCCAGAAGGTTTCTGTTTA
ATGCATCTTGCCCTTATCTTTTTTTTATTACTGTGTACAAAGATTTTTTTACACAAAGAACTTAATGCTGTATTAA
TAAATTCAGTGTGTAGCTTCAATTGGGATAGTTCCAAAAGTGAAGATTTTGTGAGGAATAAGTGCAAATTTTTTT
TTTATTTTAAAAAATTCTTTGAACTCTTAAGTCTTTGTGTCTGCAATGAAATTGTACTCCTTGACAGTTGATAG
ATTATGTATTCTTCCATCCCTCAAACCTGCATTCCACTATATTTATTTTGGCAAAAGATGAGCTGTATTTGTT
TGAAATCTGAGACACTATGTTCAATTGG

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FIGURE 2185

MNIFRLTGDLSHLAAIVILLKIKWTRSCAGISGKSQLLFALVFTTRYLDLFTSFISLYNTSMKVIYLACSYATV
YLIYLFKFKATYDGNHDTFRVEFLVVPVGGLSFLVNHDFSPLEILWTFSIYLESVAILPQLFMISKGTGEAETITTH
YLFFLGGLYRALYLVNWIWRFYFEGFFDLIAVVAGVVQTILYCDFFLYITKVLKGKKLSLPA

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FIGURE 2186

ATGAGCGACATCCGCCACTCGCTGCTGCGCCGCGATGCGCTGAGCGCCGCCAAGGAGGTGTTGTACCACCTGGAC
ATCTACTTCAGCAGCCAGCTGCAGAGCGCGCCGCTGCCCATCGTGGACAAGGGCCCCGTGGAGCTGCTGGAGGAG
TTCGTGTTCCAGGTGCCCAAGGAGCGCAGCGCGCAGCCCAAGAGACTGAATTCCTTCAGGAGCTTCAACTTCTT
GAAATCATGTGCAATTATTTCCAGGAGCAAACCAAGGACTCTGTTCCGGCAGATTATTTTTTCATCCCTTTTCAGC
CCTCAAGGGAACAAAGCCGATGACAGCCGGATGAGCTTGTGGGAAAACCTGGTCTCCATGGCGGTGGCTGTGTGT
CGAATCCCGGTGTTGGAGTGTGCTGCCTCCTGGCTTCAGCGGACGCCCCTGGTTTACTGTGTGAGGTTAGCCAAG
GCCCTTGTAGATGACTACTGCTGTTTGGTGCCGGGATCCATTACAGACGCTGAAGCAGATATTCAGTGCCAGCCCCG
AGATTCTGCTGCCAGTTCATCACCTCCGTTACCGCGCTCTATGACCTGTATCAGATGACCTCATTCCACCTATG
GACTTGCTTGAAATGATTGTACCTGGATTTTTGAGGACCCAAGGTTGATTCTCATCACTTTTTTAAATACTCCG
ATTGCGGCCAATCTGCCAATAGGATTCTTAGAGCTCACCCCGCTCGTTGGATTGATCCGCTGGTGCCTGAAGGCA
CCCCTGGCTTATAAAAGGAAAAAGAAGCCCCCTTATCCAATGGCCATGTCAGCAACAAGGTCACAAAGGACCCG
GGCGTGGGGATGGACAGAGACTCCCACCTCTTGTACTCAAACTCCACCTCAGCGTCTGCAAGTGCTCATGACG
CTGCAGCTGCACCTGACCGAGAAGAATCTGTATGGCGCCTGGGGCTGATCCTCTTCGACCACATGGTCCCGCTG
GTAGAGGAGATCAACAGGTTGGCGGATGAACTGAACCCCCCTCAACGCCTCCCAGGAGATTGAGCTCTCGCTGGAC
CGGCTGGCGCAGGCTCTGCAGGTGGCCATGGCCTCAGGAGCTCTGCTGTGCACGAGAGATGACCTGAGAACCTTG
TGCTCCAGGCTGCCCCATAATAACCTCCTCCAGCTGGTGATCTCGGGTCCCGTGCAGCAGTCGCCTCACGCCGCG
CTCCCCCGGGGTTCTACCCCCACATCCACACGCCCCCGCTGGGCTACGGGGCTGTCCCGGCCACCCCCGCCGCC
CACCCCCGCTGCCCCACGACCCCCGGCCACACCTTCATCTCCGGCGTGACCTTCCCTTCAGGCCCATCCGCTAG

GCTGGCCCGTGTTGCTCTGCGCTCTCGCTGGACGAAGCCTTTTCGAGATGGAAGGGGTGGCCGGACTCCCAGA
AGAGAACCTCGGGGAAGGGGTGCGGCAGCCCCCTCCCCGCCGAGAACCGTCTTGGTGTACGGAGTCCAGGTGC
TTCCCACCCGGTGCATTCTTTGACATGCAGATTGGATGGTGGAGGGAAGAGTCCAGCCTCTGCCGAGAGCCTGC
TGCGTGCAATTTTTAAAGATGCCGATCCTGGGAGCCTCTGTTCTCTGCGCATTTTCAGACACAGCCTGTGTGGCGA
GGAGTGTGACGGCAGGAGCCACGGGTGCAAGCCCGTGTGTCTGGCCTCTTTCTCGTGAAGACGATGTGTCCCCG
CCAGAAAAAGTGGGCACCTTCTGCAGCCCCGTGAGCTGAGCCCAGGCTGCGTAGTGACCACAAGCTTATGTGCAG
CACTGCTCAGGGAGGCTGTGAGGAATTCCTTCACCTCGGAAAGGAACCTTCTCAGTTTTATTGGGGGTGTCTAAA
TTTCCTTTCATATGTTCAAATAAAATTTTTCTAAACAGT

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FIGURE 2187

MSDIRHSLRRDALSAAKEVLYHLDIYFSSQLQSAPLP IVDKGPVELLEEFVFQVPKERSAQP KRLNSLQELQLL
EIMCNYFQEQT KDSVRQII FSSLFSPQGNKADDSRMSLLGKLVSM AVAVCRIPVLECAASWLQRTPVVYCVRLAK
ALVDDYCCLVPGSIQTLKQIFSASPRFCCQFITSVTALYDLSSDDLIPMDLLEMIVTWIFEDPR LILITFLNTP
IAANLP IGFLELTPLVGLIRWCV KAPLAYKRKKKPPLSNGHVS NKVTKDPGVGMDRDSHLLYSKLHLSVLQV LMT
LQLHLTEKNLYGRLGLILFDH MVPLVEEINRLADELNPLNASQEIELSLDRLAQALQVAMASGALLCTRDDLRTL
CSRLPHNNLLQLVISGPVQQSPHAALPPGFYPHIHTPPLGYGAVPAHPAAHPALP THPGHTFISGVTFPFRPIR

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FIGURE 2188

GGCACGAGGAAGCTACTCAGATAAGAGGCTCCAAGAGGACATTTTTGGATGTGAAAAACAATGAGAAGGAGGACA
ACACACATTTACAATCGTCTTAATTTGTACTCAGAAAAAGGATGTGAAGACAATGCACAGGGAATACAATAGTT
TCAGATCTGTGTACAGTTTCCTTTTGCTTCATCTCCTGCAACAATGTAATGAAGACACCATGATATCATTAAAT
TTCACACAAAAGGAAAAATGAGGCTGAAATGGTGTGGGCAAGGCCAGGAATCTGGAGCATCCCTAACCAAGCAGC
AGAGCACCTGGGATAGAGAAAGTGCTCAAGAATGTTCACTTACTGATTACTACAATCAAAAAAGATACGACACT
AATTTACCACATTCTTCTTACTTATTTTATGAGATACTATTCTTCCAAGGTGGAGAAAGTGGAGAAAGTAGAGTG
ACGCAGCTAAGGGAGTAAATCGACCCCTCAGCCAACAAGTGGCAAAAGCCTGAAGAAAGTGATCAAGATCACTGAT
GACCCCGCGGCCCATCTCCAAGGGGGCGGGTATCACAACCCCGACGCCACACCACGTATCATTCCGCAAACTCC
CGCGCCTCCACGCAGAACTGGCAAGAGGGAAGCGAGACAGCAGTGAACAGCTGGTACGCAGCACCCACAGCAC
CGCGGCAGCAGCTAGTGCCGACTCCCGCCTAGCTCTTTGACTCTGTTTCGCGGGAAGAATGGGGAAACAGTAAGG
TTGCGGCGCCTCCCGCGAGACGAGGTACCTGAGGCTGGCCCCGCAGTCCCCCGCCGACACCAGCACCGGAGCTTCA
CACCCCACTTCCGGGGTCAAGTCACCGCCGGGAATCCTGTGATCGCAGAAAGGTAGTCTCAGGTTCCGCCCCCTAT
CCAAGTCCCGCCTCCACTGCCTCTCGCCCTGTATCTGTCAACTTCCGGGACGCCGCGCGTCACTAAGCAGCCAAT
CTCCACTTCCGGACTCATCCAGCCCCCTTCTCCACCCCTTTCAGAGACAGCGCGATTGCGATTTAGGTTTCCGCGC
ATTTAATTGGCGAAGCTGGAGCGCTAGTCTTCGCTGATTGGTGCCGAGAAATCTGCCCCATAGACACCCGCGGGG
CGCACAGTTTCAGTCGTCCGTGGGTTTCCCGCCAGCCGCAGTCTTGGACCATAATCATGGTGGACATGATGGACT
TGCCCGAGTTCGCGCATCAACGCCGGCATGTAGCTCAATTCATCGACAAGCCTGTCTGCTTCGTAGGGAGGCTGG
AAAAGATTTCATCCACCGGAAAAATGTTTATTCTTTCAGATGGAGAAGGAAAAAATGGAACCATCGAGTTGATGG
AACCCCTTGATGAAGAAATCTCTGGAATTGTGGAAGTGGTTGGAAGAGTAACCGCCAAGGCCACCATCTTGTGTA
CATCTTATGTCCAGTTTAAAGAAGATAGCCATCCTTTTGATCTTGGACTTTACAATGAAGCTGTGAAAATTATCC
ATGACTTCCCTCAGTTTTATCCTTTAGGGATTGTGCAACATGATGATCTTGATGGATTTTCATACGATTGTAAA
TGAGCTATATTAAAGTCTATTAAAGGAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2189

MVDMDLPRSRINAGMLAQFIDKPVCFVGRLEKIHPTGKMFILSDGEGKNGTIELMEPLDEEISGIVEVVGRVTA
KATILCTSYVQFKEDSHPFDLGLYNEAVKIIHDFPQFYPLGIVQHD

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FIGURE 2190

CAACCGAATGGTCAACCATTTTATTGCTGAGCTCAAGCGCAAGCATAAGAAGGACATCAGTGAGAGCAAGAGAGC
TGTAAGATGCCTCCGTACTGCTTGTGAACATGCTAAGCGTACTCTCTCTTCCAGCACCCAAGTCAGTATTGAGAT
CGATTCTCTCTATGTAGGAATTGACTTCTATACCTCCATTACCTGTGCCCAGTTTGAAGAATTGAATGCCTGGGG
GATTCCCTGTTGGTGGAGCTCCTCCTTCTGGTGGTGCTTCCTTAGGGCCCACCATCGAAGAGGTTGATTAAGCCA
ACCCAAGTATAGATGTAGCATTGTTCCACACATTTAAACATTTGAAGGACCTAAATTTGTAGCAAATTCTGTGG
CAGTTTTAAAAAGTTAAGCTGCTATAGTAAGTTACTGGGCATTCTCAATACTTGAATATGGAACATATGCACAGG
GGAAGGAAATAACATTGCACTTTATAAAACACTGTATTGTAAGTGGAATGCAATGTCTTAAATAAACTATTTA
AAATTGGCACCAT

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FIGURE 2191

CAGCCATCCTGTCTGGAGACAAGTCTGAAAATGTTCAAGATTGCTGCTCTTGGACGTCACCTCCTTTCCCTTG
GTATTGAACTGCTAGTGGAGTCATGACCATCCTCATCAACTGTAATACCACCATTCTACCAAGCAGACACAGA
CCTTCATTACCTATTCTGACAACCAGCCTGGTGTGCTTATTCAGGTTTATGAAGGTGAGCGTGCCATGTCCAAGG
ATAACAACCTGCTTGGCAAGTTTGAATTCACGGGCATACCTCCTGAACCCCAAGGTGTTCTCAGATTGAAGTCA
CTTTTGACATTGATGCCAATGGTATCCTCAGTGTCTCTGCTGTGGACAAAAGTACAGGAAAAGAGAATAAAATTA
CTATCACTAATAATAAGGGCCATTTGAGCAAGGAAGACATTGAACGTATGGTCCAGGAAGCTGAGAATTAAAAAG
CTGAAGATGAGAAGCAGAGGGACAAGGCGTCATCCAAGAATTCACCTTGAGTCCTATGCATTCAACATGAAAGCAA
CTGTGGAAGATGAGAACTTCAAGACAAGATTAATGATGAGGACAAACAGAAGATTCTGGACAGGTGTAATGAAA
TTATCAACTGGCACAATAAGAATCGGACTGCCAAGAAGGAAGAATTTGAACATCAGCAGAAAGAGCTGGAGGAAC
TTTGCAACCCAATCATCACCAGCTGTACCAGAGTGCAGAAGGCATGCCAGGAAGAATGCCTGGGGGATTCCCTG
TTGGTGGAGCTCCTCCTTCTGGTGGTGTCTCCTTAGGGCCCACCATCGAAGAGGTTGATTAAGCCAACCCAAGTA
TAGATGTAGCATTGTTCCACACATTTAAAACATTTGAAGGACCTAAATTTGTAGCAAATTCGTGGCAGTTTTAA
AAAGTTAAGCTGCTATAGTAAGTTACTGGGCATTCTCAATACTTGAATATGGAACATATGCACAGGGGAAGGAAA
TAACATTGCACTTTATAAACACTGTATTGTAAGTGGAAAATGCAATGTCTTAAATAAACTATTTAAAAATTGGCA
CCAT

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FIGURE 2192

MTILINCNTTIPKQTQTFITYSDNQPGVLIQVYEGERAMSKDNNLLGKFEFTGIPPEPQGV PQIEVTFDIDANG
ILSVSAVDKSTGKENKIIITNNKGHLSKEDIERMVQEAEN

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FIGURE 2193

CCGTAGTGTCTCATTGCAGATAATTTTAGCTTAGGGCCTGGTGGCTAGGTCGGTTCTCTCCTTTCCAGTCGGAG
ACCTCTGCCGCAAACATGCTCCGCCAGATCATCGGT CAGGCCAAGAAGCATCCAAGCTTGATCCCCCTCTTTGTA
TTTATTGGAAC TGGAGCTACTGGAGCAACACTGTATCTCTTGGCTCTGGCATTGTTCAATCCAGATGTTTGTTGG
GACAGAAATAACCCAGAGCCCTGGAACAAACTGGGTCCCAATGATCAATACAAGTTCTACTCAGTGAATGTGGAT
TACAGCAAGCTGAAGAAGGAACGTCCAGATTTCTAAATGAAATGTTTCACTATAACGCTGCTTTAGAATGAAGGT
CTTCCAGAAGCCACATCCGCACAATTTTCCACTTAACCAGGAAATATTTCTCCTCTAAATGCATGAAATCATGTT
GGAGATCTCTATTGTAATCTCTATTGGAGATTACAATGATTAAATCAATAAATAACTGAAAAAAAAA

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FIGURE 2194

MLRQIIGQAKKHPSLIPLFVFIGTGATGATLYLLRLALFNPDVCWDRNNPEPWNLGPNQYKFYSVNVVDYSKLK
KERPDF

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FIGURE 2195

GCCATCTTCCAGTAATTCGCCAAATGACGAACACAAAGGGAAAGAGGAGAGGCACCCGATATATGTTCTCTAGG
CCTTTTAGAAAACATGGAGTTGTTCTTTGGCCACATATATGCGAATCTATAAGAAAGGTGATATTGTAGACATC
AAGGGAATGGGTACTGTTCAAAAAGGAATGCCCCACAAGTGTACCATGGCAAACTGGAAGAGTCTACAATGTT
ACCCAGCATGCTGTTGGCATTGTTGTAAACAAACAAGTTAAGGGCAAGATTCTTGCCAAGAGAATTAATGTGCGT
ATTGAGCACATTAAGCACTCTAAGAGCCGAGATAGCTTCCTGAAACGTGTGAAGGAAAATGATCAGAAAAAGAAA
GAAGCCAAAGAGAAAGGTACCTGGGTTCAACTAAAGCGCCAGCCTGAGCTGCTGGAACCTATTCCCTATGAATTC
ATGGCATAATAGGTGTT

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FIGURE 2196

MTNTKGKRRGTRYMF SRPFRKHGVVPLATYMRIYKKGDIVDIKGMGTVQKGMPHKCYHGKTGRVYNVTQHAVGIV
VKNQVKGKILAKRINVRIEHIKHSKSRDSFLKRVKENDQKKKEAKEKGTWVQLKRQPELLEPIPYEFMA

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FIGURE 2197

GCTCGGGCGCGGGGCGTTCTTGGTGCGCCGGGCGGTGGTGAGTCCGGGCTCCCGTGGCCGCGTGCTGGGAGGAGA
CTGGAGCCC GGTTAGGAAGAATGGAGTTGGCGACTCGCTACCAGATCCCTAAAGAAGTGGCTGACATCTTTAACG
CCCCAGTGATGATGAAGAGTTTGTGGCTTCCGAGATGATGTTCCCATGGAAACCCTCTCGTCAGAGGAGAGCT
GCGATAGTTTTGACTCACTAGAGTCAGGGAAAACAGCAGGATGTGCGCTTTCATTCCAAATACTTCACAGAAGAGC
TAAGAAGAATTTTTATAGAGGACACTGACTCAGAGACTGAGGATTTTGCAGGATTTACGCAGAGTGATCTGAATG
GAAAGACTAACCAGAAAGTAATGGTCGTGGAGTCAGATTTGAGTGATGATGGCAAAGCATCTTTGGTGAGCGAGG
AAGAGGAAGATGAAGAAGAAGATAAGGCTACCCCTAGAAGAAGCAGGTCTAGAAGAAGTAGTATTGGTCTTCGAG
TAGCCTTTCAGTTCCCCACCAAGAAGCTGGCCAAACAAACCAGATAAAAACAGTTCTTCCGAGCAGTTGTTTTCTA
GCGCACGCTTACAGAATGAGAAAAAAACAATTCTTGAAAGAAAGAAAGACTGTAGACAGGTGATACAAAGGGAAG
ATTCTACCTCTGAGTCTGAGGATGACTCTCGGGATGAGAGCCAGGAGAGTTTCTAGATGCTTTGCTGAAAAGGACCA
TGAACATCAAGGAGAACAAAGCCATGCTTGCCAGTTATTGGCGGAATTGAACTCGATGCCAGATTTCTTCCAG
TACGAACCCCAACCTCAGCTTCTAGGAAGAAGACAGTGAGGCGGGCCTTCTCGGAGGGACAGATCACGCGGCGTA
TGAACCCCAACCCGAGTGCGCGGCCCTCTGAGAAGTTTGTCTAGAGAACTTCACTGTCTCAGCCGCTAAATTTG
CGGAAGAGTTTTACAGCTCCGAAGAAGGAAGACAATTGGGGGGAAATGCCGGGAGTACAGACGACGTACCCGTA
TATCTTCTTTTCGGCCAGTGGAGGATATCACCGAAGAGGACTTAGAAAATGTTGCCATAACTGTTTCGAGATAAAA
TCTATGATAAAGTTCTGGGTAAACAGTGCCATCAGTGTCGACAAAAGACCATCGACACCAAGACAGTGTGTGCGA
ACCAGGGTTGCTGTGGTGTGCGAGGACAGTTCTGTGGACCATGCCTGCGGAACCGCTATGGGGAGGATGTCAGAT
CGGCATTGCTGGACCCGATTGGGTGTGTCCCCCTGTCTGGGATCTGCAATTGCAGCTACTGTGCGGAAGCGTG
ACGGCCGCTGTGCCACAGGAATCCTCATTCTTGCCAAAGTTTTATGGTTATGACAATGTTAAGGAATATCTGG
AGAGCTTACAAAAGGAGCTGGTAGAAGACAATTAAGAGGAAAACAAACAGAACCCACCTCACCATAGAGTAC
TCCAACAAGACATGCATACCATTGGTGCCTAAGATTATTAAACTTGACTGAACAAAAGGGGACCATCAACATT
GTAGACACTGGACACTGGAGGCCTTACAGAGTGCTAGCCTCTTCCTTCAGGACTCACCTGGGGCCTGCTGCTTTT
ATATTTTGAAAGAGTTTAAGGGCTAATAATTTAATTTGTTGTTTGTAAATAATTAATCTCCGTTCTTTCCGGC
TGCATTGCTTTTGCATGTTACATATGATGTACTTTTATGATGTACTTTTTTTTTTTTGGAGATGGAGTCTTGTTT
TGTTGCCAGGAGGAGTGCAAGTGGTGCAACCTCGGCTCACTGCAACCTTTGCCTCCTAGGTTCAAGTGATTCTC
CTACCTCCTGAGTAACTGGGATTACAGTCGTGTGCCACCACGCTCAGCCCTGAGTTAGTTTCTAGTATTTTTTTC
TGACTTTCACCTAAGGATAGCGTTGAAAAAGAATGCACGTGTGAGTTACTAAAAAGTTAGAATAATGTGCATG
GGAACAGTGCAGCAACATGCTAGAAAACTCTCACTGCACCTCCAGCAGAGGCTAGAGGAATGCCAGTGTTACCTTA
CGCTTCTAGAAGCAGAGCCACTCCAGCCAGAACCCATTTGCAGTCTTCTCTTCGCTCTTCAGCCTGAAGGTCCA
GATGTAGCTGGGGCCTCTCAGTTTGGTTCTATACACAGGGCACTCGTAGGTCTGTTTGGTTTCTTGTCTGTCCAC
GGGGGTGGCTTTTGCAGATGACCGGCATAGGGCATGCCAGCTCCTTGAGACGGGCTTCAACAATGGTTCTCTGC
TTGGGTGTCCAGCGGGCGCTATGGCAAAAACACAGCGGTTGCAATTGTGTGGCAGCTTGCTACTAATGATAAT
GATCAAGTAAGTTGTTGATGCAATAAACATTCAACATTCTGGTTTTGTCTAT

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FIGURE 2198

CTTTTTCGCAACGGGTTT GCCGCCAGAACACAGGTGTCGTGAAAAC TACCCCTAAAAGCCAAAATGGGAAAGGAA
AAGACTCATATCAACATTGTCGTCATTGGACACGTAGATT CAGGCAAGTCCACCACTACTGGCCATCTGATCTAT
AAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCTGCTGAGATGGGAAAGGGCTCCTTC
AAGTATGCCCTGGGTCCTTGGATAAACTGAAAAGCTGAGCGTGAAACGTGGTATCACCATTGATATCTCCTTGTGGAA
TTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGGGACTTCATCAAAAACATGATTACA
GGGACATCTCAGGCTGACTGTGCTGTCTGATTGTTGCTGCTGGTGTGGAATTTGAAGCTGGTATCTCCAAG
AATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAAC TAATTGTCGGTGTTAACAAA
ATGGATTCCACTGAGCCACCCTACAGCCAGAAGAGATATGAGGAAATTGTTAAGGAATCAGCACTTACATTAAGA
AAATTGGCTACAACCCCGACACAGTAGCATTGTGCCAATTTCTGGTTGGAATGGTGACAACATGCTGGAGCCAA
GTGCTAACATGCCTTGGTTCAAGGGATGGAAAGTCACCCGTAAGGATGGCAATGCCAGTGGAACACGCTGCTTG
AGGCTCTGGACTGCATCCTACCACCAACTCATCCAAGTACAAAGCCCTTGCGCCTGCCTCTCCAGGATGTCTACA
AAATTGGTGGTATTGGTACTGTTCTGTTGGCCGAGTGGAGACTGGTGTCTCAAACCCGGTATGGTGGTCACT
TTGCTCCAGTCAACGTTACAACGGAAGTAAATCTGTCGAAATGCACCATGAAGCTTTGAGTGAAGCTCTTCCTG
GGGACAATGTGGGCTTCAATGTCAAGAATGTGTCTGTCAAGGATGTTGCTCGTGGCAACGTCGCTGGTGACAGCA
AAAATGACCCACCAATGGAAGCAGCGGGCTTCACTGCTCAGGTGATTATCCTGAACCATCCAGGCCAAATAAGCA
CCGGCTATGCCCCGTGATTGGATTGCCACACGGCTCACATTGCATGCAAGTTTGCTGAGCTGAAGGAAAAGATTG
ATCGCCGTTCTGGTAAAAAGCTGGAAGATGGCCCTAAATTCCTGAAGTCTGGTGATGCTGCCATTGTTGATATGG
TTCCTGGCAAGCCCATGTGTGTTGAGAGCTTCTCAGACTATCCACCTTTGGGTCGCTTTGCTGTTTCGTGATATGA
GACAGACAGTTGCGGTGGGTGT CATCAAAGCAGTGGACAAGAAGGCTGCTGGAGCTGGCAAGGTCACCAAGTCTG
CCCAGAAAGCTCAGAAGGCTAAATGAATATTATCCCTAATACCTGCCACCCCACTCTTAATCAGTGGTGGAAGAA
TGGTCTCAGAACTGTTTGTTCATTGGCCATTTAAGTTTAGTAGTAAAAGACTGGTTAATGATAACAATGCATC
GTAAACCTTCAGAAGGAAAGGAGAATGTTTTGTGGACCACTTTGGTTTTCTTTTTTTCGCTGTGGCAGTTTAAAG
TTATTAGTTTTTAAATCAGTACTTTTTAATGGAAACAAC TGGACCAAAAATTTGTCACAGAATTTTGAGACCCA
TT

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FIGURE 2199

MLEPSANMPWFKGWKVTRKDGNASGTTILLEALDCILPPTHPTDKPLRLPLQDVYKIGGIGTVPVGRVETGVLKPG
MVVTFAPVNVTTTEVKSVEMHHEALSEALPGDNVGFNVKNVSVKDVRGNVAGDSKNDPPMEAAGFTAQVIILNHP
GQISTGYAPVLDCHTAHIACKFAELKEKIDRRSGKKLEDGPKFLKSGDAAIVDMVPGKPMCYESFSDYPPLGRFA
VRDMRQTVAVGVKAVDKKAAGAGKVTKSAQKAQKAK

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FIGURE 2200

GAAATTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGGGACTTCATCAAAAACATGAT
TACAGGGACATCTCCAAGAATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAATA
ATTGTCGGTGTTAACAAAATGGATTCCACTGAGCCACCCTACAGCCAGAAGAGATATGAGGAAATTGTTAAGGAA
TCAGCACTTACATTAAGAAAATTTGGCTACAACCCCGACACAGTAGCATTGTTGCCAATTTCTGGTTGGAATGGTG
ACAACATGCTGGAGCCAAGTGCTAACATGCCTTGGTTCAAGGGATGGAAAAGTCACCCGTAAGGATGGCAATGCCA
GTGGAACCACGCTGCTTGAGGCTCTGGACTGCATCCTACCACCAACTCATCCAAGTACAAGCCCTTGCGCCTGC
CTCTCCAGGATGTCTACAAAATTTGGTGGTATTGGTACTGTTTCCTGTTGGCCGAGTGGAGACTGGTGTCTCAAAC
CCGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTACAACGGAAGTAAAAATCTGTCGAAATGCACCATGAAGCTT
TGAGTGAAGCTCTTCCTGGGGACAATGTGGGCTTCAATGTCAAGAATGTGTCTGTCAAGGATGTTTCGTGCTGGCA
ACGTCGCTGGTGACAGCAAAAATGACCCACCAATGGAGCAGCGGGCTTCACTGCTCAGGTGATTATCCTGAACC
ATCCAGGCCAAATAAGCACC GGCTATGCCCTGTATTGGATTGCCACACGGCTCACATTGCATGCAAGTTTGCTG
AGCTGAAGGAAAAGATTGATCGCCGTTCTGGTAATATGGTTTCCTGGCAAGCCCATGTGTGTTGAGAGCTTCTCAG
ACTATCCACCTTTGGGTGCTTTGCTGTTTCGTGATATGAGACAGACAGTTGCGGTGGGTGTCATCAAAGCAGTGG
ACAAGAAGGCTGCTGGAGCTGGCAAGGTCACCAAGTCTGCCCAGAAAGCTCAGAAGGCTAAATGAATATTATCCC
TAATACCTGCCACCCCACTCTTAATCAGTGGTGGAAAGAA

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FIGURE 2201

MVTTCSQVLTCLGTMLEALDCILPPTRPTDKPLHLPLQDVYKIGGIGSVFVGRVETGVLKPGMVVTFAPVNVT
TEVKSVMHHEALSEALPGDNVGFNVKNVSVKDVRHGNVAGDSKNDPPMEAAGFTAQVILNHPGQISTGYAPVL
DCHTAHIACKFAELKEKIDHRSGNMVPGKPMCVESFSDYPSLGCFVRDMRQIVTVGVKAVDKKTAGAGKVTKS
AQKAQKAK

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FIGURE 2202

TATAAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCTGCTGAGATGGGAAAGGGCTCC
TTCAAGTATGCCTGGGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATTGATATCTCCTTGTTGG
AAATTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGGGACTTCATCAAAAACATGATT
ACAGGGACATCTCAGGCTGACTGTGCTGTCCTGATTGTTGCTGCTGGTGTGGTGAATTTGAAGCTGGTATCTCC
AAGAATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAACATAATTGTCGGTGTAAAC
AAAATGGATTCCACTGAGCCACCCCTACAGCCAGAAGAGATATGAGGAAATTGTTAAGGAATCAGCACTTACATTA
AGAAAATTGGCTACAACCCCGACACAGTAGCATTGTGCGCAATTTCTGGTTGGAATGGTGACAACATGCTGGAGC
CAAGTGCTAACATGCCTTGGTTCAAGGGATGGAAAGTCACCCGTAAGGATGGCAATGCCAGTGGAACACGCTGC
TTGAGGGCTCCAGTCAACGTTACAACGGAAGTAAAAATCTGTGCAAAATGCACCATGAAGCTTTGAGTGAAGCTCTT
CCTGGGGACAATGTGGGCTTCAATGTCAAGAATGTGTCTGTCAAGGATGTTTCGTTCGTGGCAACGTCGCTGGTGAC
AGCAAAAATGACCCACCAATGGAAGCAGCGGGCTTCACTGCTCAGG

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FIGURE 2203

GTGAAACTACCCCTAAAAGCCAAAATGGGAAAGGAAAAGACTCATATCAACATTGTCGTCATTGGACACGTAGA
TTCAGGCAAGTCCACCACTACTGGCCATCTGATCTATAAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATT
TGAGAAGGAGGCTGCTGAGATGGGAAAGGGCTCCTTCAAGTATGCCTGGGTCTTGGATAAACTGAAAGCTGAGCG
TGAACGTGGTATCACCATTGATATCTCCTTGTGGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGT
GTGAA

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FIGURE 2204

GAAAACTACCCCTAAAAGCCAAAATGGGAAAGGAAAAGACTCATATCAACATTGTCGTCATTGGACACGTAGATT
CAGGCAAGTCCACCACTACTGGCCATCTGATCTATAAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATTTG
AGAAGGAGGCTGCTGAGATGGGAAAGGGCTCCTTCAAGTATGCCTGGGTCTTGGATAAACTGAAAGCTGAGCGTG
AACGTGGTATCACCATTGATATCTCCTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCC
GGGACATCTCAGGCTGACTGTGCTGTCCTGATTGTTGCTGCTGGTGTGGTGAATTTGAAGCTGGTATCTCCAAG
AATGGGCAGACCCGAGAGCATGCCCTTCTGG

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FIGURE 2205

CTCTCTCCGGTCCATGCCTCCAAGATGACAAAGAAAAGAAGGAACAACGTTTCGTGCCAAAAGGGCCGCGGCCAC
GTGCAGCCTATTCGCTGCACTAACTGTGCCCCGATGCGTGCCCAAGGACAACGCCATTAAGAAATTCGTCATTCTGA
AACATAGTGGAGGCTGCAGCAGTCAGGGACATTTCTGAAGCGAGCGTCTTCGATGCCTATGTGCTTCCCAAGCTG
TGTGTGAAGCTACATTACTGTGTGAGTTGTGTAATTCACAGCAAAGTAGTCAGGAATCGATCTCGTGAAGCCCGC
AAGGACCGAACACCCCCACCCGATTTAGACCTGCGGGTGCTGCCGCACGTCCCCACCAAAGCCCATGTAAGGA
GCTGAGTTCTTAAAGACTGAAGACAGACTATTCTCTGGAGAAAAATAAAATGGACATTGTACTTAAAAAAAACA
AAAAAAAAAAAAAAAAAAAAA

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FIGURE 2206

CCGTGATGTGGCGCCTGCACAXTCCTTTCCCTTTTCGGATTCCCGACGCTGTGGTTGCTGTAAGGGGTCCTCCCTG
CGCCACACGGCCGTCGCCATGGTGAAGCTGAGCAAAGAGGCCAAGCAGAGACTACAGCAGCTCTTCAAGGGGAGC
CAGTTTGCCATTCGCTGGGGCTTTATCCCTCTTGTGATTTACCTGGGATTTAAGAGGGGTGCAGATCCCGGAATG
CCTGAACCAACTGTTTTGAGCCTACTTTGGGGATTAAAGGATTATTTGGTCTTCTGGATTTGGAGGCAATCAGCGG
ACAGCATGGAAGATGTGTGCTCTGGCTCGGATAAGAGATGGGACATCATTAGTCACTAGTTGGATGGCACAAGG
CTCTTCACAGACGCATCTGTAGCAGAGTGGAACCTTGTAATACTTATGATAGAATGTATCAGAATAAATGTTTTT
AACAGTGTA

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FIGURE 2207

MVKLSKEAKQRLQQLFKGSQFAIRWGFIPLVIIYLGFKRGADPGMPEPTVLSLLWG

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FIGURE 2208A

GGACGTCCGGCTTCGGAGCGGGAGTGTTCGTTGTGCCAGCGACTAAAAAGAGAATTAAATATCGGGTGATGTTGAG
AAAGGCAAGAAGATTTTATTATGAAGTGTTCACAGTGCCACACCGTTGAAAAGGGAGGCAAGCACAAGACTGGG
CCAAATCTCCATGGTCTCTTTGGGCGGAAGACAGGTTCAGGCCCCCTGGATACTCTTACACAGCCGCCAATAAGAAC
AAAGGCATCATCTGGGAGAGGATACACTGATGGAGTATTTGGAGAATCCCAAGAAGTACATCCCTGGAACAAAA
ATGATCTTTGTCGGCATTAGAAGAAGGAAGAAAGGGCAGACTTAATAGCTTATCTCAAAAAAGCTACTAATGAG
TAATAATTGGCCACTGCCTTATTTATTACAAAACAGAAATGTCTCATGACTTTTTTATGTGTACCATCCTTTAAT
AGATCTCATAACAGGAATTCAGATCATGAATGACTGACAGAATATTTTGTGGGAGTCCCTGATTTAAACTAA
GACTGGCTTGTTGTTAAATGAATATGTTGAGTTTTGAATTTAATAGTAACTCCAATTCAGTAAATGGTATCAC
TGTTTACCCCTTTTAAAGATATGATTAGACTTCGTTAGTAATGTTCAACTTTTACAAAGATGGTGAGTGCCATC
TTAAACTTACTGGAGATTGGTTTTATTTAGATTTATATAACTGGTTATGTGAATATATTTAAATACTGGGGA
AATTGCTTCACTGTCTTAGAACCAAGCAAGATTCACCTGTGTTTTGTGTTTCAATGTTGCCTCTTAAAGGCA
AGGGTTGAAGATAAATAAGGTTGCAATGTCATAGTTTTGGCCTTAACTATGCCAATCTAATTATAATCCCTGT
ATTTAAATGGTTTTCTTTTACTTATTGAAAGGCATTTTAGTGTGGTTTTATGTGTAATATTAAAGATTATTCAACA
CCTCTCACATCTTACAGATCTATAAGGTCACATGCTTTTAAATAGTAGCAAGTTAACTTCACTCTTGAATTCT
TTACAATCTAAGTCAAACCTAAGTTATAATTTAGGATTGTCTTTAAACAGCCATTCAGAAACAAAAGTGTAGAACT
GTGTATTTGATTGGGAATGGTGCTTTTGCCAACTTAAAGGATTAAAGTAACGGAGATATACACAAATTTTAAAA
TTATGTGTGATCACAAGACTAAAGATAATTAAAAAGAAAACACAGATCATGACTTTTGTACTGTGCTTGATTTT
ATGACTGATGCACAAATTTAATGATTAAAAAGTGCAAGGAGCCCTAAATGTGAGTGCAGCAGCCCTAAGTGCAG
TGCAGCAGTGTTAACCAGTCATGGTGCTAGATTGTTTACTTGGTTTTCTAGGACTGCCTCAACTAGAATAACACT
TCACTAATTGACTCTTAGTTTCTTTGCTCAGATTGAGAAGTGCAGCATTATGCCAGACATGGACAGAGGAATGC
CTGTGGTCATAGTTTTGTGATGTGTAAACAGTGTATAATTACATACTGAATTATTTCAATGCATAGTCTGTGCCATA
CACATTTAGAGTAGTCCTTGGAGATTTTATGGAGATGGTGAGCACAAGGTAAGTCATAAAGAATAATGAGAAAAAT
AAATCTATGCTGGTGCAGCTGAGAAGTGTATCTTTGTGGGACAGTGAGAAGACTGAGAAGATGTGAATCCATGGT
CTCAAAGGTGATAGGGACGATTAGATAGGTGTTTTAAGGCCTGAAAGCAATTTATAACATATGAGTCTTATTTTT
ATTTATAGAAATGTGGAAAGCTTGCTGTAATTCATATTTGAAGTCTTAGTCTGAGTTCTGGTGGGGAATTTAAAA
ATGCATCCTGGAAATCCTTTAAAGATTTTCAAGCTTTGAAAGGCCTTGAGCAGAGGACTTGGTGACTGTATAAAG
TTAGTGGTATTCAGGGACAGTGTAGCAAGTAGCTTACAAGGGGACAATTCCTGGACTAATGAGAAAGACCTGAAGT
GAAGGCTAGAGAGTTGATTTTTTTTTTTTTTTTGGCATCCTGGAATGATACAGGAAACATATTAGATAGATACAG
AAATGTGTTCAACCTTCCATCTTGGCTAGTTGTGGCTTTAGTTGTTTTTGTAGACATGGTCAAGCTGTGTGCGC
CAAGGCTGGAGTGCAGTGGTGCGATCTCGGCTGGCTGCAGCCTCTATTTCCAGGCTCAAGCGATTCTCTCACTT
CAGCTTCCCAAGTAGCTGGGACTGCGGGTGTTCGCCACCATGCCAGCTAATTTTTTGTAGAGATGGAGTTTTG
CCATGTGGTCCCAGGCTGGTCTCAAACCTCCTGAGCTCAAGCAATCCGTCCACTTGCCTTGGCTCCCCAAGTGCT
GGGATTGCAGGCGTGAGCCACCAGGCCCTGCTGGTTTTTCAAATTCAGAAATCTTATTATTTAACCAGAAAGTAA
TCAGCCCAGTAGTAACCTTAGGTTAATTTTTTTTTTTCAGGTTTTAAATTTTTTCTCATTTATTTTTTCTGAGACGGAG
TTTCGCCCTTTTCGCCAGGCTGAGTACAGTGGTGCAATCTCACTGCAACCTCCGCCTTCCAGTTGCAAGTGATT
CTCCTGCCTCAGCCTCCTGAGTAGCTGGGATTGCAGGCACCCGCCACCACGCCTGGCTAATTTTTGTATTTTTAG
TGGAGATGGTGTTCACCATGTTGGCCAGACTGGTCTTGGACTCCTGACCTCGTGATCCACCCACCTTGGCCTCC
CAAAGTTCTAGGATTACAGGTGTGAGCCACCACGTCCGGCCAATTTTTCTCATTTCTATGCCTCCTATATTAAGG
TCTGTGTTGGCACAGATGAGTAACCTGCCATGTTCTAGGTGAGTTATACCCAAGCACTTCTGGTGGTTTTAAATGT
GATTCGTGTAACCTTTTTATTTTTATTTTTTTTGTAGATAATTTCACTCTTGTGCCCAGGCTGGAGTGCAATGGCGT
GATCGCTGCTCACCAGCAACCTCCGCCTTCCAGGTTCAAGCGATTCTCCTGACTCAGCCTCTCAAGTAGCTGGGAT
TACAAGCATGCGCCACCATGCCAGCTTATTTTGTGTTTTTAGTAGAGACAGGGTTTTCTCCATGCTGGACAGGCT
GGTCTTGAACCTCCCGACGTGCGGTGATCTGCCTGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCAC
CACGCCTGGCCAATTATGTAATTTTTTAAAAAGGACATTTCTATCAGGGATATATACCTTCAGAAATAAGGAAAT
AGGGGAAAAAAGAGCACTATAAACCACATGTTTTTCAATTTCTAGTGCTTCGCTGTAAGTGGCTAGGTTGGTAGAA
TCAAAAACAAGGGCCAGATGTATTTAAGGGGTATTTCAGATGCCACCTACATGCTTATTTTGTCTAGAACAGTGCT
GTCTAATAGAACTTTCTGTGACGATGGATATTTGTAGACTTTTGTGTCCAGTGTGGTAGCCACTAACCACATG
TGGCTGTAAAGCCCTTGAAATATAGCTAGTGTGACTAGAAAGTATTTTATTTTAAATTTACATAGGCACAAGTGG

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FIGURE 2208B

CTAGTGGCTACTGTATTGACATTCTGGGTCTAGGACTAGAACCAGTGGTCTGTAACAAAAGTACTTTCTCTTTAC
TCTATTAAATCTAGAATTAGCCGGGCATGGTCGCTCATGCCTGTGGTCCCAGCACTTTGGGAGGCCAAGGCAGGC
AGATCACTTGAGGTCGGGCGTTTGAGACCAGCCTGGTCAACATGGCGAAACCCTGTCTCTACAAAAAACATAAAA
GTTAGCCAGGTGTGGTGGTGGGCACCTGTAGTCTCAGCTACTTGGGAGGCTGAGGCACAAGAATCACTTGAACCT
GGGAGGTGGAGGTTGCAGTGAGCCAGGATTGTGCCACTGCACTCAAGCCTGGGTGACGAGTGAAACTGTCTCCAA
AAAAAAAAAAAAAAAA

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FIGURE 2209

MGDVEKGKKIFIMKCSQCHTVEKGGKHKTGPNLHGLFGRKTGQAPGYSYTAANKNKGI IWGEDTLMEYLENPKKY
IPGTMIFVGIKKKEERADLIAYLKATNE

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FIGURE 2210

AGTAGCAGCAGCGCCGGGTCCCGTGCGGAGGTGCTCCTCGCAGAGTTGTTTCTCGAGCAGCGGCAGTTCTCACTA
CAGCGCCAGGACGAGTCCGGTTTCGTGTTTCGTCCGCGGAGATCTCTCTCATCTCGCTCGGCTGCGGGAAATCGGGC
TGAAGCGACTGAGTCCGCGATGGAGAGAGAAAAGGAACAGTTCCGTAAGCTCTTTATTGGTGGCTTAAGCTTTGA
AACCACAGAAGAAAGTTTGAGGAATACTACGAACAATGGGGAAAGCTTACAGACTGTGTGGTAATGAGGGATCC
TGCAAGCAAAAGATCAAGAGGATTTGGTTTTGTAACTTTTTTCATCCATGGCTGAGGTTGATGCTGCCATGGCTGC
AAGACCTCATTCAATTGATGGGAGAGTAGTTGAGCCAAAACGTGCTGTAGCAAGAGAGGAATCTGGAAAACCAGG
GGCTCATGTAAGTGTGAAGAAGCTGTTTGTGGCGGAATTAAGAAGATACTGAGGAACATCACCTTAGAGATTA
CTTTGAGGAATATGGAAAAATTGATACCATTTAGATAATTACTGATAGGCAGTCTGGAAAGAAAAGAGGCTTTGG
CTTTGTTACTTTTTGATGACCATGATCCTGTGGATAAAATCGTATTGCAGAAATACCATACCATCAATGGTCATAA
TGCAGAAGTAAGAAAGGCTTTGTCTAGACAAGAAATGCAGGAAGTTCAGAGTCTAGGAGTGGAAGAGGAGGCAA
CTTTGGCTTTGGGGATTACGTTGGTGGCGGTGGAAATTCGGACCAGGACCAGGAAGTAACCTTTAGAGGAGGATC
TGATGGATATGGCAGTGGACGTGGATTTGGGGATGGCTATAATGGGTATGGAGGAGGACCTGGAGGTGGCAATTT
TGGAGGTAGCCCCGGTTATGGAGGAGGAAGAGGAGGATATGGTGGTGGAGGACCTGGATATGGCAACCAGGGTGG
GGGCTACGGAGGTGGTTATGACAACATATGGAGGAGGAAATTATGGAAGTGGAAATTACAATGATTTTGGAATTA
TAACCAGCAACCTTCTAACTACGGTCCAATGAAGAGTGGAACTTTGGTGGTAGCAGGAACATGGGGGGACCATA
TGGTGGAGGAACTATGGTCCAGGAGGCAGTGGAGGAAGTGGGGGTTATGGTGGGAGGAGCCGATACTGAGCTTC
TTCTATTTGCCATGGGCTTCACTGTATAAATAGGAGAGGATGAGAGCCCAGAGGTAACAGAACAGCTTCAGGTT
ATCGAAATAACAATGTTAAGGAACTCTTATCTCAGTCATGCATAAATATGCAGTGATATGGCAGAAGACACCAG
AGCAGATGCAGAGAGCCATTTGTGAATGGATTGGATTATTTAATAACATTACCTTACTGTGGAGGAAGGATTGT
AAAAAAAATGCCTTTGAGACAGTTTCTTAGCTTTTTAATTGTTGTTTCTTTCTAGTGGTCTTTGTAAGAGTGTA
GAAGCATTCTTTCTTTGATAATGTTAAATTTGTAAGTTTCAGGTGACATGTGAAACCTTTTTTAAGATTTTCTC
AAAGTTTTGAAAAGCTATTAGCCAGGATCATGGTGTAAATAAGACATAACGTTTTTCCTTTAAAAAAATTTAAGTG
CGTGTGTAGAGTTAAGAAGCTGTTGTACATTTATGATTTAATAAAATAATTCTAAAGGAAAAAA

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FIGURE 2211

MEREKEQFRKLF IGGLSFETTEESLRNYIEQWGKLTDCVVMRDPASKRSRGFGFVTFSSMAEVDAAAMAARPHSID
GRVVEPKRAVAREESGKPGAHVTVKKLFVGGIKEDTEEHHLRDYFEEYGKIDTIEIITDRQSGKKRGFGFVTFDD
HDPVDKIVLQKYHTINGHNAEVRKALSRQEMQEVQSSRSRGGNF GFGDSRGGGGNF GPGPGSNFRGGSDGYGSG
RGFGDGYNGYGGGPGGGNFGGSPGYGGGRGGYGGGGPGYGNQGGGYGGGYDNYGGGNYGSGNYNDFGNYNQQPSN
YGPMKSGNFGGSRNMGGPYGGGNYGPGSGGSGGGYGGRSRY

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FIGURE 2212

AGTAGCAGCAGCGCCGGGTCCCGTGCGGAGGTGCTCCTCGCAGAGTTGTTTCTCGAGCAGCGGCAGTTCTCACTA
CAGCGCCAGGACGAGTCCGGTTTCGTGTTTCGTCCGCGGAGATCTCTCTCATCTCGCTCGGCTGCGGGAAATCGGGC
TGAAGCGACTGAGTCCGCGATGGAGAAAACTTTAGAACTGTTCTTTGGAGAGGAAAAAGAGAGAAAAGGAACA
GTTCGGTAAGCTCTTTATTGGTGGCTTAAGCTTTGAAACCACAGAAGAAAGTTTGAGGAACTACTACGAACAATG
GGGAAAGCTTACAGACTGTGTGGTAATGAGGGATCCTGCAAGCAAAAGATCAAGAGGATTTGGTTTTGTAACCTT
TTCATCCATGGCTGAGGTTGATGCTGCCATGGCTGCAAGACCTCATTCAATTGATGGGAGAGTAGTTGAGCCAAA
ACGTGCTGTAGCAAGAGAGGAATCTGGAAAACCAGGGGCTCATGTAAGTGTGAAGAAGCTGTTTGTGGCGGAAT
TAAAGAAGATACTGAGGAACATCACCTTAGAGATTACTTTGAGGAATATGGAAAAATTGATACCATTGAGATAAT
TACTGATAGGCAGTCTGGAAAAGAAAAGAGGCTTTGGCTTTGTTACTTTTGATGACCATGATCCTGTGGATAAAAT
CGTATTGCAGAAATACCATAACCATCAATGGTCATAATGCAGAAGTAAGAAAGGCTTTGTCTAGACAAGAAATGCA
GGAAGTTCAGAGTTCTAGGAGTGGAAGAGGAGGCAACTTTGGCTTTGGGGATTACGTTGGTGGCGGTGGAAATTT
CGGACCAGGACCAGGAAGTAACCTTTAGAGGAGGATCTGATGGATATGGCAGTGGACGTGGATTTGGGGATGGCTA
TAATGGGTATGGAGGAGGACCTGGAGGTGGCAATTTTGGAGGTAGCCCCGGTTATGGAGGAGGAAGAGGAGGATA
TGGTGGTGGAGGACCTGGATATGGCAACCAGGGTGGGGGCTACGGAGGTGGTTATGACAACATATGGAGGAGGAAA
TTATGGAAGTGGAAATTACAATGATTTTGGAAATTATAACCAGCAACCTTCTAACTACGGTCCAATGAAGAGTGG
AAACTTTGGTGGTAGCAGGAACATGGGGGACCATATGGTGGAGGAACTATGGTCCAGGAGGCAGTGGAGGAAG
TGGGGGTATGGTGGGAGGAGCCGATACTCAGCTTCTTCCTATTTGCCATGGGCTTCACTGTATAAATAGGAGAG
GATGAGAGCCCAGAGGTAACAGAACAGCTTCAGGTTATCGAAATAACAATGTTAAGGAACTCTTATCTCAGTCA
TGCATAAATATGCAGTGATATGGCAGAAGACACCAGAGCAGATGCAGAGAGCCATTTGTGAATGGATTGGATTA
TTTAATAACATTACCTTACTGTGGAGGAAGGATTGTAAAAAAAATGCCTTTGAGACAGTTTCTTAGCTTTTTAA
TTGTTGTTTCTTTCTAGTGGTCTTTGTAAAGAGTGTAGAAGCATTCTTCTTTGATAATGTAAATTTGTAAGTTT
CAGGTGACATGTGAAACCTTTTTTAAGATTTTCTCAAAGTTTTGAAAAGCTATTAGCCAGGATCATGGTGTAAAT
AAGACATAACGTTTTTCTTTAAAAAAATTTAAGTGCCTGTGTAGAGTTAAGAAGCTGTTGTACATTTATGATTT
AATAAAATAATTCTAAAGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2213

MEKTLETVPLEKREKEQFRKLF IGGLSFETTEESLRNYEQWGKLTDCVVMRDPASKRSRGFGFVTFSSMAEV
DAAMAARPHSIDGRVVEPKRAVAREESGKPGAHVTVKKLFVGGIKEDTEEHHLRDYFEEYGKIDTIEIITDRQSG
KKRGFGFVTFDDHDPVDKIVLQKYHTINGHNAEVRKALSRQEMQEVQSSRSRGGNFFGGDSRGGGGNFPGPGS
NFRGGSDGYGSGRGFGDGYNGYGGGPGGNFGGSPGYGGGRGGYGGGGPGYGNQGGGYGGGYDNYGGGNYGSGNY
NDFGNYNQPSNYGPMKSGNFGGSRNMGGPYGGGNYGPGSGGSGGYGGRSRY

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FIGURE 2214

CGCTGAGGAGACTCCGGTCACTGTCCTCGCCCCGCTCCCCCTTCCCTCCCCCTTGGGGACCACCGGGGCCACGC
CGCGAACGTAATAGCTCTTCAAGTCTGCAATAAAAAATGGCCTCCAACAAAACCTACATTGCAAAAAATGGGAAA
AAACAGAATGGAAAGAGTAAAAAGTTGAAGAGGCAGAGCCTGAAGAATTTGTCGTGGAAAAAGTACTAGATCGA
CGTGTAGTGAATGGGAAAGTGGAAATATTTCTGAAGTGAAGGGATTTACAGATGCTGACAATACTTGGGAACCT
GAAGAAAATTTAGATTGTCCAGAATTGATTGAAGCGTTTCTTAACCTCTCAGAAAGCTGGCAAAGAAAAAGATGGT
ACAAAAGAAAATCTTTATCTGACAGTGAATCTGATGACAGCAAATCAAAGAAGAAAAGAGATGCTGCTGACAAA
CCAAGAGGATTTGCCAGAGGTCTTGATCCTGAAAGAATAATTGGTGCCACAGACAGCAGTGGAGAATTGATGTTT
CTCATGAAATGGAAAGATTGAGATGAGGCAGACTTGGTGCTGGCGAAAAGAGGCAAATATGAAGTGTCTCAAATT
GTAATTGCTTTTTATGAAGAGAGACTAAGTTGGCATTCTTGTCAGAAAGATGAAGCTCAATTAATTGTTTACATTG
TTCTTTTATATATATTTATATATATATATAAAAAATTGGGTCTTAGATTTTGTATTTACTAGTGTGACAAAATACT
ACATCCTAATGAAATCAAGTTTGATATGTTTGTGTTTGAAGTAGCGTTGGAAGAGTTGTTGGGGGTTTTTTGCA
TCCATAGCACTGGTTACTTTGAACAAATAAATAAAAGCTTTCTGTAGTTGCTTCCTTTATCAGAAAAGAACATTT
GATACCATGGTATATCATTTCTCTTCAATTAAGAAGCAGCTTTTCTAAATGTTGGGGGAAATGTCCATAGTCATT
ACTCAGTCAAACTTGTGTTCTCATGAGCCTAAGGACCATTCTAGATTTATTACGTGTTTTTTGTGTGTGTGTGT
GTGTGTGTGTGTGTGTATCCATAAAATGCATATGTAATTTTTTTTTGTTTTTAAGCATTCACCCAAACAAAA
AAATCACAGGTAAACCCATGTTTCTGAGATGCCATTATCCAAGCAAAATAAGAGATAATCCCTTCAAGTTAAAT
TGAAAATTTTCTGAAACCATAACATTTCAAGTGAATAAGTAATTCTAGATAGGACAATTTAAATTGGATAATTT
TAAAGTGTCTATAATTGCAGTGGTTTATTTGCAAAATTCCTAAAAGGAAAAATTTTATCACTGCCATCACAGCAG
GTTTCCTCATCCAGATGAGGAACTAGACAAATGCTAGTGTGTTTTAACTAGCTAAACAAAACCTAAGTTAAATGA
ACATTTAAAAGTTTCCCTAGCGGGCCATTCTTAGCAAAATGTTGGAATCCCTGTTGCTACATTGACTAAAAGGT
CATGATGAATGGAATATGTAAGACTTGGCTCATAGAAACCTAATCAGATGGTTAGAGGTGTTGGCAGTTTAGGAC
CTGCTGTCATAAATGTGTGAACAACCTTTTGTAACTAACCTATTGACCTGCATGTTTTTTCTTACCCCAATTC
ATTACATGGAGGCTCAATCTTGAGTTTGCTTTACTGGTTCAGCAAAAGCCAGGAAGAACAACCTTTGTAGTAATCA
AAATGTTATCCAACGTATATTTGTTTACTTTATTGTAAATACTGGTGAACAGTGGTTAATAAATAGTTTTATATT
CCTTTATGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2215

MASNKTTLQKMGKKQNGKSKKVVEAEPEEFVVEKVLDRRVVNGKVEYFLKWKGFTDADNTWEPEENLDCPELIEA
FLNSQKAGKEKDGTKRKSLSDSESDDSKSKKKRDAADKPRGFARGLDPERIIGATDSSGELMFLMKWKDSDEADL
VLAKEANMKCPQIVIAFYEERLTWHSCPEDEAQ

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FIGURE 2216

TCCCCCGGGCGGCCCGCGCGCAGCTCCCGGCTCCCTCCCCCTTCGGATGTGGCTTGAGCTGTAGGCGCGGAGGG
CCGGAGACGCTGCAGACCCGCGACCCGGAGCAGCTCGGAGGCGGTGAATAATAGCTCTTCAAGTCTGCAATAAAA
AATGGCCTCCAACAAAACTACATTGCAAAAAATGGGAAAAAACAGAATGGAAAGAGTAAAAAAGTTGAAGAGGC
AGAGCCTGAAGAATTTGTCTGGGAAAAAGTACTAGATCGACGTGTAGTGAATGGGAAAGTGGAAATATTTCTGAA
GTGGAAGGGATTTACAGATGCTGACAATACTTGGGAACCTGAAGAAAATTTAGATTGTCCAGAATTGATTGAAGC
GTTTCTTAACCTCTCAGAAAGCTGGCAAAGAAAAAGATGGTACAAAAAGAAAATCTTTATCTGACAGTGAATCTGA
TGACAGCAAATCAAAGAAGAAAAGAGATGCTGCTGACAAACCAAGAGGATTTGCCAGAGGTCTTGATCCTGAAAG
AATAATTGGTGCCACAGACAGCAGTGGAGAATTGATGTTTCTCATGAAATGGAAAGATTCAGATGAGGCAGACTT
GGTGCTGGCGAAAGAGGCAAATATGAAGTGTCTCAAATTGTAATTGCTTTTTATGAAGAGAGACTAACTTGGCA
TTCTTGCTCCAGAAGATGAAGCTCAATTAATTGTTACATTGTTCTTTTATATATATTTATATATATATATAAAAAAT
TGGGTCTTAGATTTTGATTTACTAGTGTGACAAAATAACTACATCCTAATGAAAATCAAGTTTGATATGTTTGT
TTGAAAGTAGCGTTGGAAGAGTTGTTGGGGGTTTTTTTGCATCCATAGCACTGGTTACTTTGAACAAAATAAAATAAA
AGCTTTCTGTAGTTGCTTCCTTTATCAGAAAAGAACATTTGATACCATGGTATATCATTTCCTCTTCATTAAAGA
ACAGCTTTTCTAAATGTTGGGGGAAATGTCCATAGTCATTACTCAGTCAAAACTTGTGTTCTCATGAGCCTAAGG
ACCATTCTAGATTTATTACGTGTTTTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTATCCATAAAATGCATAT
GTAAATTTTTTTTTTGTTTTTAAGCATTCACCCAAACAAAAAATCACAGGTAAACCCATGTTTCTGAGATGCCAT
TATCCAAGCAAATAAGAGATAATCCCTTCAAGTTAAATTGAAAATTTTCTGAAACCATACATTTCAAGTGAA
ATAAGTAATCTAGATAGGACAATTTAAATTGGATAATTTTAAAGTGTCTATAATTGCAGTGGTTTATTTGCAAA
ATTCCTAAAAGGAAAAATTTTATCACTGCCATCACAGCAGGTTTCCTCATCCAGATGAGGAACTAGACAAATGC
TAGTGTGTTTTAACTAGCTAAACAAACTAAGTTAAATGAACATTTAAAAGTTTCCCTAGCGGGCCATTCTCTAG
CAAAATGTTGGAATCCCTGTTGCTACATTGACTAAAAGGTCATGATGAATGGAATATGTAAGACTTGGCTCATAG
AAACCTAATCAGATGGTTAGAGGTGTTGGCAGTTTAGGACCTGCTGTCATAAATGTGTGAACAACCTTTTGTAAC
CTAACCTATTGACCTGCATGTTTTTTCTTTACCCCAATTCATTACATGGAGGCTCAATCTTGAGTTTGCTTTACT
GGTTCAGCAAAAGCCAGGAAGAACAACTTTGTAGTAATCAAAATGTTATCCAACCTGTATATTGTTTACTTTATTG
TAAATACTGGTGAACAGTGGTTAATAAATAGTTTTATATTCCTTTATGCAA

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FIGURE 2217

MASNKTTLQKMGKKQNGKSKKVEEAEPPEFVVEKVLDRRVVNGKVEYFLKWKGFTDADNTWEPEENLDCPELIEA
FLNSQKAGKEKDGTKRKSLSDSESDDSKSKKKRDAADKPRGFARGLDPERIIGATDSSGELMFLMKWKDSDEADL
VLAKEANMKCPQIVIAFYERLTWHSCPEDEAQ

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FIGURE 2218

GACGGCAAATGGCGGACTTCGACACCTACGACGATCAGGCCTACAGCAGCTTCGGCAGCGGCAGAGGGTCCCGCG
GCAGTGCTGGTGGCCATGGTTCCCGTAGCCAGAAGGAGTTGCCACAGAGCCCCCTACACAGCATACGTAGGAA
ATCTACCTTTCAATACGGTTCGGGGCGACATAGATGCTATCTTTAAGGATCTCAGCATAAGGAGTGACGGCTAG
TCAGAGACAAAGACACAGATAAAATTTAAAGGATTCTGCTATGTAGAATTCGATGAAGTGGATTCCCTTAAGGAAG
CCTTGACATACGATGGTGCACCTGTTGGGCGATCGGTCACTTCGTGTGGACATTGCAGAAGGCAGAAAACAAGATA
AAGGTGGCTTTGGATTAGAAAAGGTGGACCAGATGACAGAGGCTTCAGGGATGACTTCTTAGGGGGCAGGGGAG
GTAGTCGCCCAGGCGACCGGCGAACAGGCCCCCATGGGCAGCCGCTTCGGAGATGGCCCTCCCTCGGTGGAT
CCAACATGGATTTAGAGAACCCACAGAAGAGGAAAGCGCACAGAGACCACGACTCCAGCTTAAACCTCGAACAG
TCGCGACGCCCCCTCAATCAAGTAGCCAATCCCAACTCTGCTATCTTCGGGGGTGCCAGGCCTAGAGAGGAAGTTG
TTCAAAGGAGCAAAAATGAGCCTGCGGTTGGGAGGGAATGGGGCGTGGGGGGTTAGAGCAGGACCACAGCCTGG
TGAGTCCCCGGGCAGCCGTCTGACGCCGCCACTCCTGCGCCTGCCATTGGCCTCCTCACAGCGGAAACACAGCT
TGTGAGTGCATGTCAGCTGTTAACAAGTGGTTTTTAGTACATTCTGGGCTTTGCTGTATCTATCTAGTGCCTGTT
TGTGCGTTTTTTTCTTTCTTCCGCTGCTTCCCCATTTTCTTTCTGTCTTTTTCTCCTGCTCCTTGTTTTCCAG
CAGCACACGGGGTTCTTCGGAGGAGCAGAGGTGGCCGCCGTGGGGGGGCGTTTGGGCTGCGGTGCTGCGTCATTT
TTCTTTTGCTTTCTCTTTACTTTAGACACTGGCCCAACTCCAGGAGTTTCTTTTCATTCCCTCAGTGCTTCTCTT
CTGACCTGCATGTTGAGTTCTGTATTGCTGGGGCTTCCAACAAAAACCAGAGTCACTGACAGAGGGAACCTGCAGA
GACCTTGTGGTATTAGCTGTGATGGATATAGAGAATCGGAGGCACCTTGTTTTACAACTAGGATAAAAAATAT
CTGCAGGGTCCCTTTCCATTCCCTATTTAGAGGGAGTCTGGCTCCATGACCCCTCCCGAGTGGACTGTCCAAGCA
GATAGGCTCACACGAGAAAACAGTGAGGCTGAAAGGGGGGGCCATGGAAGAGCGGTAGGGAGTCCACGGAGAAGAT
GCAGTGAATGCTTGATGCATTACACGTGTGTGTGCCAGCTAGTTCACTCCTTTCGCCGTGCGTGGTGGAGG
CTCGCTCTCTGCGCGGGTGAGTGAACGGCCAGCGGGTTTCTTTTCTGCTGGGCCAAGGCGCTTTGGGGGTGGA
GGGGGTGGTGTGCTGGCGCTGCACTGGGCTGACTGCGGCGCTGACACAGCGTTTCCCCCATCCCTGTTGCCTGTGT
GTTGTGTGGATCTGTTCTAGTATAGGCAACATAATGAGATACTGTGCTTCCACCTCCCTTCAGTTAGAGCC
AAAATGGGTCTAGAATCTGGCACTTTACTCATTTCTTTGATAAATTGTACTGTGCAGAGCTGTCAGGAACCTTC
AGATAGCAGTAGAGGACTGCAGCTGCCTAGGTCTGCGGCCACATCTTGGGGACACACTGGATTGTTCCCATGTGC
AGGGTTCAGCACTTACGTGGGAGTGCTAGGGGTTAGGCTTTTGAGCTTGAACGCCTGCGTGTGAACAGATGAAAA
ATCCTTCAGTACCCAAGTCCAGTCTGTCCTATGGGGAGCAGTTTGGGGCGGCCGCGCAGCAGGAGCCTGGGAAA
GAGGCCCTCGCCAGGTGATGGCAGGGCCAAGGTGGCCTGGGGCACCCAGCGGAATGTGCTTAGTATTTGGTCACC
AGCCGTCATCCTGGGCTTTTCTACTGTGTCTTGTACAAAGGCTCAGCAATCCACAGAATCTCTCTCTCTCTCT
TCCACCTGTCAGCTTCTCTGCTTCTGAGATAAGAACCATTGTGTAAACACCAACACTTAACTTCAGAAAGACATG
CATTATGTGGTGAATCAAACCCGAGGCTTTCAGATGACCTACTTACATCTTCAATGTGGATAAGATAAAGAACA
AAACACATGCATCTAACTGCTGGGCAATCCAGTTGACTTTTAAATGTAAGAATGGAATTCCAAACACTTAAACAC
ATTAGCTATATGACAGAAAGTAAATCTATGGATATGGTATTTTGTGAATGATCTTTTAAATAAAAGAAAACCTT
ACGTAATATTT

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FIGURE 2219

GGAGCGGAGACGGCAAATGGCGGACTTCGACACCTACGACGATCAGGCCTACAGCAGCTTCGGCAGCGGCAGAGG
GTCCCGCGGCAGTGCTGGTGGCCATGGTTCCCGTAGCCAGAAGGAGTTGCCACAGAGCCCCCTACACAGCATA
CGTAGGAAATCTACCTTTCAATACGGTTTCGGGGCGACATAGATGCTATCTTTAAGGATCTCAGCATAAGGAGTGT
ACGGCTAGTCAGAGACAAAGACACAGATAAATTTAAAGGATTCTGCTATGTAGAATTCGATGAAGTGGATTCCCT
TAAGGAAGCCTTGACATACGATGGTGCACGTGTTGGGCGATCGGTCACTTCGTGTGGACATTGCAGAAGGCAGAAA
ACAAGATAAAGGTGGCTTTGGATTTCAGAAAAGGTGGACCAGATGACAGAGGCTTCAGGGATGGCCCTCCCTCGG
TGGATCCAACATGGATTTTCAGAGAACCCACAGAAGAGGAAAGCGCACAGAGACCACGACTCCAGCTTAAACCTCG
AACAGTCGCGACGCCCCCTCAATCAAGTAGCCAATCCCAACTCTGCTATCTTCGGGGGTGCCAGGCCTAGAGAGGA
AGTTGTTCAAAGGAGCAAAAATGAGCCTGCGGTTGGGAGGGAATGGGGCGTGGGGGGTTAGAGCAGGACCACAG
CCTGGTGAGTCCCCGGGCAGCCGTCCTGCAGCCGCCACTCCTGCGCCTGCCATTGGCCTCCTCACAGCGGAAACA
CAGCTTGTGAGTGATGTCAGCTGTTAACAAGTGGTTTTTAGTACATTCTGGGCTTTGCTGTATCTATCTAGTGC
CTGTTTGTGCGTTTTTTTTCTTTCTTCCGCTGCTTCCCCATTTTCCTTCCACCTGTCAGCTTCTCT

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FIGURE 2220

GGAGCGGAGACGGCAAATGGCGGACTTCGACACCTACGACGATCAGGCCTACAGCAGCTTCGGCAGCGGCAGAGG
GTCCCGCGGCAGTGCTGGTGGCCATGGTTCCCGTAGCCAGAAGGAGTTGCCACAGAGCCCCCTACACAGCATA
CGTAGGAAATCTACCTTTCAATACGGTTCGGGGCGACATAGATGCTATCTTTAAGGATCTCAGCATAAGGAGTGT
ACGGCTAGTCAGAGACAAAGACACAGATAAAATTTAAAGGATTCTGCTATGTAGAATTCGATGAAGTGGATTCCCT
TAAGGAAGCCTTGACATACGATGGTGCCTGTTGGGCGATCGGTCACTTCGTGTGGACATTGCAGAAGGCAGAAA
ACAAGATAAAGGTGGCTTTGGATTAGAAAAGGTGGACCAGATGACAGAGGCTTCAGGGATGACTTCTTAGGGGG
CAGGGGAGGTAGTCGCCCAGGCGACCGGCGAACAGGCCCCCCCATGGGCAGCCGCTTCGGAGATGGCCCTCCCT
CGGTGGATCCAACATGGATTTTCAGAGAACCCACAGAAGAGGAAAGCGCACAGAGACCACGACTCCAGCTTAAACC
TCGAACAGTCGCGACGCCCCCTCAATCAAGTAGCCAATCCCAACTCTGCTATCTTCGGGGGTGCCAGGCCTAGAGA
GGAAGTTGTTCAAAAGGAGCAAAATTGAGCCTGCCATTGGCCTCCTCACAGCGGAAACACAGCTTGTGAGTGCAT
GTCAGCTGTTAACAAGTGGTTTTTAGTACATTCTGGGCTTTGCTGTATCTATCTAGTGCCTGTTTGTGCGTTTT
TTCTTTCTTCCGCTGCTTCCCCATTTTCCTTC

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FIGURE 2221

MADFDTYDDQAYSSFSGSGRSGRSAGGHGSRSQKELPTEPPYTAYVGNLPPFNTVRGDIDAIKDLIRSIVRLVRD
KDTDKFKGFCYVEFDEVDSLKEALTYDGALLGDRSLRVDIAEGRKQDKGGFGFRKGGPDDRGFRDDFLGGRGGSR
PGDRRTGPPMGSRFGDGPPLGGSNMDFREPTTEESAQRPRQLQKPRTVATPLNQVANPNSAIFGGARPREEVVQK
EQK

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FIGURE 2222

CGCGTCAGGCCGCTCCTCTCGGCTCCGCGCTCCTTCCCTCGCGCGTGGGCACCCGCCCCGAGCGGTGAGAGCGC
GTGCGCGCGCGCCCTTCTCCGTGGGCGAGCCAGCCAGTCCCCTGACACGCTCGCAGTCTGTGGGCCCTCCGGG
AGGCGGGCGGAGGTACCCGCGGGGAGAGGGGCGGGCGCAGCATGGCAGCCTCCTTACGGCTCCTCGGAGCTGCCTC
CGGTCTCCGGTACTGGAGCCGGCGGCTGCGGCCGGCAGCCGGCAGCTTTGCAGCGGTGTGTTCTAGGTCAGTGGC
TTCAAAGACTCCAGTTGGATTCAATTGGACTGGGCAACATGGGGAATCCAATGGCAAAAAATCTCATGAAACATGG
CTATCCACTTATTATTTATGATGTGTTCCCTGATGCCTGCAAAGAGTTTCAAGATGCAGGTGAACAGGTAGTATC
TTCCCCAGCAGATGTTGCTGAAAAAGCTGACAGAATTATTACAATGCTGCCACCAGTATCAATGCAATAGAAGC
TTATTCCGGAGCAAATGGGATTCTAAAAAAGTGAAGAAGGGCTCATTATTAATAGATTCCAGCACTATTGATCC
TGCAGTTTCAAAGAATTGGCCAAAGAAGTTGAGAAAATGGGAGCAGTTTTCATGGATGCCCTGTTTCTGGTGG
TGTAGGAGCTGCACGATCTGGGAACCTCACGTTTATGGTGGGAGGAGTTGAAGATGAATTTGCTGCTGCCAAGA
GTTGCTGGGGTGCATGGGCTCCAACGTGGTGTACTGTGGAGCTGTTGGGACTGGGCAGGCGGCAAAGATCTGCAA
CAACATGCTGTTAGCTATTAGTATGATTGGAAGTCTGAAGCTATGAATCTTGGAAATCAGGTTAGGGCTTGACCC
AAAATACTGGCTAAAATCCTAAATATGAGCTCAGGACGGTGTGGTCAAGTGACACTTATAATCCTGTACCTGG
AGTGATGGATGGCGTTCCCTCGGCTAATAACTATCAGGTTGGATTGGAACAACACTCATGGCTAAGGATCTGGG
ATTGGCACAAGACTCTGCTACCAGCACAAAGAGCCCAATCCTTCTTGGCAGTCTGGCCCATCAGATCTACAGGAT
GATGTGTGCAAAGGGCTACTCAAAGAAAGACTTCTCATCCGTGTTCCAGTTCCTACGAGAGGAGGAGACCTTCTG
AGTGTGCCCTTTGGCCACGGACACTGTTGGGAACCAAACTCTGTCTTGGAGCCTCCTTTTAGCTCACTCCACAAG
TAAATGGATTTAATCAAAGTCACTATCTGCTTTTGATTGTCTAGGTACAGTAATCCCTAGGATTTTTCACCG
CTTATTCTTTTTGTCTTTTTTAACAAACATATTATCCGAATTTTTTTCTGCAAGCCACTGATAGTCTCTGCTAAC
TAGCTTAATTGACCTTTTTTACAAAGTTTGATCCCCAAGCATCCTCAACTAAATCATTGAATACTTCAATCAGGAT
ATTATCTGCTTTACTTTTACAAATAAAACCAAATCTTTTGTCAACAGGATGAAACCCATCTTAAAGGAAAGAAAAG
GAATTGGTGTGAAGAGAGAAGTTAGAGAAGGGAAATGCAGTGAATTACTATCTGTGTCCATCAGGAAGTTTGTCC
TGTTAACCAAATGGTTACTGCACTACCAGGGTTACTGGTTTATTTTCCAGGGAGCTGATAAAGCAGGAGAACTGT
TGCTGCATGTTTTCTATTTGGACTCCGTCACAAATATGGTAGGATATCCCTCACCAACTCCCGACACTCAGCAGAC
TTGTTTTTATATTTTTTTCTTTCTTGTTCATTCTTACTACGTATTTTTTGACTTAAGAATGACATCTTTAGATGC
ATTTCAGAGCCAATGATGATATTTGCTTTAGATAATTATTATATTATATAAATATAGCCATATTATTTTGAATT
CAAATAAATTTCTATACTGGT

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FIGURE 2223

MAASLRLLGAASGLRYWSRRLRPAAGSFAAVCSRSVASKTPVGF IGLGNMGNPMAKNLMKHGYPLIIYDVFPDAC
KEFQDAGEQVVSSPADVAEKADRIITMLPTSINAIEAYSGANGILKKVKKGSLLIDSSTIDPAVSKELAKEVEKM
GAVFMDAPVSGGVGAARSGNLTVMVGGVEDEFAAAQELLGCMGSNVVYCGAVGTGQAAKICNNMLLAISMIGTAE
AMNLGIRLGLDPKLLAKILNMSSGRCWSSDTYNPVPVMDGVPSANNYQGGFGTTLMAKDLGLAQDSATSTKSPI
LLGSLAHQIYRMMCAKGYSKKDFSSVFQFLREEETF

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GACGCAAGGCCCTACTGTCTGGCTGGGAGGGGAGGTGTAGCCGGTCTTTGGGGGTAGGCGGTAGTGGCGGAAGAGGT
TCGGCGGCTGATGGCGGATCAGGATCGGAAGCCTGCGTAACTTTCTCCCTTGATCCGGGAGTCTTTCCACTGGAT
TCACAATGACATCCTTTCAAGAAGTCCCATTTGCAGACTTTCCAACCTTTGCCCATGTCATCTTTCAAATGTGGCCA
AGAGTTACCTTCCTAATGCACACCTGGAATGTCATTACACCTTAACTCCATATATTCATCCACATCCAAAAGATT
GGGTTGGTATATTCAAGGTTGGATGGAGTACTGCTCGTGATTATTACACGTTTTTATGGTCCCCTATGCCTGAAC
ATTATGTGGAAGGATCAACAGTCAATTGTGTACTAGCATTCCAAGGATATTACCTTCCAATGATGATGGAGAAT
TTTATCAGTTCTGTACGTTACCCATAAGGGTGAAATTCGTGGAGCAAGTACACCTTTCCAGTTTCGAGCTTCTT
CTCCAGTTGAAGAGCTGCTTACTATGGAAGATGAAGGAAATTCTGACATGTTAGTGGTGACCACAAAAGCAGGCC
TTCTTGAGTTGAAAATTGAGAAAACCATGAAAGAAAAAGAAAGTGTAAAGTTAATTGCCGTTCTGGAAAAAG
AAACAGCACAACTTCGAGAACAAGTTGGGAGAATGGAAAGAGAACTTAACCATGAGAAAGAAAGATGTGACCAAC
TGCAAGCAGAAACAAAAGGGTCTTACTGAAGTAACACAAAGCTTAAAAATGGAAAATGAAGAGTTTAAAGAAGAGGT
TCAGTGATGCTACATCCAAAGCCCATCAGCTTGAGGAAGATATTGTGTGAGTAACACATAAAGCAATTGAAAAAG
AAACCGAATTAGACAGTTTAAAGGACAAACTCAAGAAGGCACAACATGAAAGAGAAACAACCTTGAATGTCAGTTGA
AGACAGAGAAGGATGAAAAGGAACTTTATAAGGTACATTTGAAGAATACAGAAATAGAAAATACCAAGCTTATGT
CAGAGGTCCAGACTTTAAAAAATTTAGATGGGAACAAAGAAAGCGTGATTACTCATTTCAAAGAAGAGATTGGCA
GGCTGCAGTTATGTTTTGGCTGAAAAGGAAAAATCTGCAAGAAGCTTTCTGCTTACAACCTCAAGTAAAGAAGATA
CTTGTTTTTTAAAGGAGCAACTTCGTAAAGCAGAGGAACAGGTTTCAGGCAACTCGGCAAGAAGTTGCTCTTCTGG
CTAAAGAAGCTCAGTGATGCTGTCAACGTACGAGACAGAACGATGGCAGACTGCATACTGCACGCTTGGAAAAAG
AGAAAGTGAAAAAGCAGTTAGCTGATGTCAGTGGCAGAAGTTAACTAAATGCTATGAAAAAGATCAGGACAAGA
CTGATACACTGGAACACGAACCTAAGAAGAGAAAGTTGAAGATCTGAAACTCCGCTCTTCAGATGGCTGCAGACCATT
ATAAAGAAAAATTTAAAGGAATGCCAAAGGCTCCAAAAACAAATAAACAACTTTTCAGATCAATCAGCTAATAATA
ATAATGTCTTACAAAAGAAAACGGGGAATCAGCAGAAAGTGAATGATGCTTCAGTAAACACAGACCCAGCCACTT
CTGCCTCTACTGTAGATGTAAAGCCATCACCTTCTGCAGCAGAGGCAGATTTTGACATAGTAACAAAGGGGCAAG
TCTGTGAAATGACCAAAGAAATTGCTGACAAAACAGAAAAGTATAATAAATGTAAACAACCTCTTGAGGATGAGA
AAGCAAAATGCAATAAATATGCTGATGAACCTGCAAAAATGGAGCTGAAATGGAAAGAACAAGTGAAAATTGCTG
AAAATGTAAACTTGAAGTGAAGTACAGGACAATTATAAAGAAGTAAAGGAGTCTAGAAAATCCAGCAG
AAAGGAAAATGGAAGGTGAGAATTCCCAGAGTCTCAATGTTTTCAAACATGCTCAGAGCAAAATGGTTATGTT
TCACATTGTCAAAATGCACAACAGTTCTGCAATATGGTAATCCTTATGCATCTCAGGAAACAAGAGATGGAGCAG
ATGGTGCTTTTTTACCCAGATGAAATACAAAGGCCACCTGTGAGAGTCCCCCTCTTGGGGACTGGAAGACAATGTTG
TCTGCAGCCAGCCTGCTCGAACTTTAGTCGGCCTGATGGCTTAGAGGACTCTGAGGATAGCAAAGAAGATGAGA
ATGTGCCTACTGCTCCTGATCCTCCAAGTCAACATTTACGTGGGCATGGGACAGGCTTTTGCTTTGATTCCAGCT
TTGATGTTTACAAGAAGTGTCCTCTCTGTGAGTTAATGTTTCCTCCTAATGATGATCAGAGCAAATTTGAAGAAC
ATGTTGAAAGTCACTGGAAGGTGTGCCCGATGTGCAGCGAGCAGTTCCCTCCTGACTATGACCAGCAGGTGTTT
AAAGGCATGTGCAGACCCATTTTGATCAGAATGTTCTAAATTTTGACTAGTTACTTTTTATTATGAGTTAATATA
GTTTAGCAGTAAAAAAAAAAAAAAAAAACCACACCTAAAATAGACCACTGAGGAGACCATAGAGCGGATGCTTCA
TGCACCCCTTTACTGCACCTTTCTGACCAGGAGCTACTTTGAGTTTGGTGTTACTAGGATCAGGGTCAGTCTTGGC
TTATCAATAAAATTTAATCTCTGTTAATCTTACCTGCTTTAAAAAAGTCTTGTGTGTTTCGTATCTTTATTTA
TTCCCTAGTTTTGCAGAACTGTCTGAATAAAGGATACAAGGATTATTTCAATGTTACTGCACTGAAAACGTGTAT
GTATTAGTGTGCTAGATTATTTAGCAGAATATTACAAGTTTCTGTTGACCTTGTTGATTGAGCATGACTACTAA
ATATTATGTAATAAAAAGCATTGTGTCATAAC

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FIGURE 2225

ATGGAGAAGCAGAGAGGGAAGTGCAGAGACAGGTCACCCAGGCGCCTGGAAACTGCCTCTATGGCCTTCACGGGA
AACGGCCTCTTTCTACTCCGGATCCCAGACTGTGTTTCTTTGAAACTGACCGTCAGAGGAGAGCGGCTGGAGGCG
GACAGACGTCTGCAGTGGGAGGCGCTCCAGGCGTTCCAGGCAGTGTCTGCGGCGAGTCACCCGCGACCGCGAG
TCACCTCACCAAGCCCTGAATTGGGACAGGAGACGAGACGTGTCGACGAGCTGCGGAGTTCCTCGCTTCTCTGGG
CCCTGCCAGCTCACAGCCAAGGTGCACCAGAGCCTCCGTCACCGCCCCCTACAGAGCACGTACTTTTATCACACGA
ACTATGACTCAGACACCACAAACCCAGACCAGGCCTCCAGGTGAGAAGTTGACTCCCCTGAGGCCTGTGGTAGGA
GAATGTGGTCTGGAAAATGAGGTGTCAGTGGTGATCAGACATCATCACTTTTCTAGTGACTGTCAGCTTAGTTTT
GTCCTACAGTTGTCTTGA

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FIGURE 2226A

CCCCGACTAGCCCCGACAGTCCCCGACTAGCCCCGACAGCCCCAGCAGGATCTGCATCGTCATCGAGCCGGCCCCAGC
TTCTGAAGGGAGATGTCATGGTGAAATGCTACCACAAGAAATACCGCTCGGCCACCCGTGACGTCATTTTCCGCC
TGCAGTTTCACACTGGGGCTGTGCAGGGCTACGGGCTGGTGTGTTGGGAAGGAGGATCTGGACAATGCCAGCAAAG
ATGACCGTTTTCTGACTATGGGAAGGTTGAATTAGTCTTCTCTGCCACGCCTGAGAAGATTCAAGGGTCCGAAC
ACTTGTACAACGACCACGGTGTGATTGTGGACTACAACAACAGACCCACTGATACGCTGGGACTCGTACGAGA
ACCTCAGTGCAGATGGAGAAGTGCTACACACGCAGGGCCCTGTTCGATGGCAGCCTTTACGCGAAGGTGAGGAAGA
AAAGCTCCTCGGATCCTGGCATCCCAGGTGGCCCCAGGCAATCCCGGCCACCAACAGCCCAGACCACAGTGACC
ACACCTTGCTGTGTGACGAGTACTCCGGCCACTCTACAGCCTCTGCCAGGACGGATAAGACGGAAGAGCGCCTGG
CCCCAGGAACCAGGAGGGGCTGAGTGCCAGGAGAAGGCAGAGTTGGACCAGCTGCTCAGTGGCTTTGGCCTGG
AAGATCCTGGAAGCTCCCTCAAGGAAATGACTGATGCTCGAAGCAAGTACAGTGGGACCCGCCACGTGGTGCCAG
CCCAGGTTACAGTGAATGGAGACGCTGCTCTGAAGGATCGGGAGACAGACATTCTGGATGACGAGATGCCCCACC
ACGACCTGCACAGTGTGGACAGCCTTGGGACCTGTCTCTCTCGGAAGGGCCTCAGTCGGGCCACCTGGGTCCCT
TCACCTGCCACAAGAGCAGCCAGAACTCACTCCTATCTGACGGTTTTTGGCAGCAACGTTGGTGAAGATCCGCAGG
GCACCTCGTTCCGGACCTGGGCCTTGGCATGGACGGCCCTATGAGCGGGAGCGGACTTTTGGGAGTCGAGAGC
CCAAGCAGCCCCAGCCCCCTGTGAGAAAGCCCTCAGTGTCCGCCAGATGCAGGCCTATGGGCAGAGCAGCTACT
CCACACAGACCTGGGTGCGCCAGCAGCAGATGGTTGTAGCTCACCAGTATAGCTTCGCCCCAGATGGGGAGGCC
GGCTGGTGAGCCGCTGCCCTGCAGACAATCCTGGCCTCGTCCAGGCCAGCCCAGAGTGCCACTCACCCCCACCC
GAGGGACAGCAGTAGGGTGGCTGTCCAGAGGGGTGTAGGCAGTGGGCCACATCCCCCTGACACACAGCAGCCCT
CTCCCAGCAAAGCGTTCAAACCCAGGTTTCCAGGAGACCAGGTTGTGAATGGAGCCGGGCCAGAGCTGAGCACAG
GCCCCCTCCCAGGCTCGCCACCCTGGACATCGACCAGTCCATCGAGCAGCTCAACAGGCTGATCCTGGAGCTGG
ATCCCACCTTCGAGCCCATCCCTACCCACATGAACGCCCTCGGTAGCCAGGCCAATGGCTCTGTGTCTCCAGACA
GCGTGGGAGGTGGGCTCCGGGCAAGCAGCAGGCTGCCTGACACAGGAGAGGGCCCCAGCAGGGCCACCGGGCGGC
AAGGCTCCTCTGTGTAACAGCCCCCTGGGCGGGAGACTCAGGAAGCTGAGCCTGGGGCAGTACGACAACGATGCTG
GGGGGCAGCTGCCCTTCTCAAATGTGCATGGGGAAAGGCTGGTGTGGACTATGCCCCAACCTGCCGCCATTCC
CCTCACCAGCGGACGTCAAAGAGACGATGACCCCTGGCTATCCCAGGACCTCGATATTATCGATGGCAGAAATT
TAAGTAGCAAGGAGTCCATGTGTTCAACTCCAGCATTTCCTGTGTCTCCAGAGACACCGTATGTGAAAACAGCGC
TGCGCCATCCTCCGTTTCAGCCACCTGAGCCCCCGCTGAGCAGCCAGCCAGTCAGCACAAAGGAGGACGTGAAC
CACGAAGCTGCCCTGAGACGCTCACTCACGCTGTGGGGATGTGAGAGAGCCCCATCGGACCCAAATCCACGATGC
TCCGGGCTGATGCGTCTCTGACGCCCTCCTTTACGAGGCTTTTGCTTCTTCTGACCATTTCCAGCAACGGCC
CTGGGCAGAGGAGAGAGAGCTCCTCTTCTGCAGAACGCCAGTGGGTGGAGAGCAGCCCCAAGCCCATGGTTTCCC
TGCTGGGGAGCGGCCGGCCACCGGAAGTCCCCTCAGCGCTGAGTTCTCCGGTACCAGGAAGGACTCCCCAGTGC
TGCTCTGCTTCCGCGCTCAGAGCTCAGGCTCCTTTCCACAGCCATGAGCTGTCCCTAGCAGAGCCACCGGACT
CCCTGGCGCCTCCCAGACCCAGGCCCTTCTGGGCTTCGGCACCGCCCCAGTGGGAAGTGGCCTTCCGCCCGAGG
AGGACCTGGGGGCTTGTGTCGCAATTCTCATGGAGCGTCACCGACCCCAAGCATCCCGCTGACAGCGACAGGGG
CTGCCGACAATGGCTTCTGTGCCACAATTTCTCACGGTGGCGCCTGGACACAGCAGCCACCACAGTCCAGGCC
TGCAGGGCCAGGGTGTGACCCTGCCCGGGCAGCCACCCCTCCCTGAGAAGAAGCGGGCCTCGGAGGGGGATCGTT
CTTTGGGCTCAGTCTCTCCCTCCTCCAGTGGCTTCTCCAGCCCGCACAGCGGGAGCACCATCAGTATCCCCTTCC
CAAATGTCTTCCCGACTTTTCCAAGGCTTCAAGCGGCCTCACCTCTGCCAGATAGTCCAGGTGATAAACTTG
TGATCGTGAAATTTGTTCAAGACACTTCCAAGTTCTGGTACAAGGCGGATATTTCAAGAGAACAAGCCATCGCCA
TGTTGAAGGACAAGGAGCGGGGCTCATTATTGTTTCGAGACAGCCATTCTTCCGAGGGGCTATGGCCTGGCCA
TGAAGGTGGCCACGCCCCACCTTCAGTCTGTCAGCTGAACAAGAAAGCTGGAGATTGGCCAATGAACTCGTCC
GGCACTTTTTGATCGAGTGTACCCCGAAGGGAGTGCAGTTGAAAGGGTGTCTGAATGAACCATATTTCCGGAGCC
TGACGGCCTTGGTGTGCCAGCATTCCATCACGCCCTTGGCCTTGGCGTCAAGCTGCTTATCCCAGAGAGAGATC
CATTGGAGGAAATAGCAGAAAGTTCTCCCCAGACGGCAGCCAATTACAGCAGCTGAGCTGTTGAAGCAGGGGGCAG
CCTGCAACGTGTGGTACTTGAACCTGTGTGGAGATGGAGTCCCTCACCGGCCACCAGGCGATCCAGAAGGCCCTGA
GCATACCCCTGGTCCAGGAGCCTCCACCTGTGTCCACAGTTGTGCACTTCAAGGTGTGAGCCAGGGCATCACCC
TGACAGACAATCAGAGGAAGCTCTTCTCCGGAGGCATTACCCCGTGAACAGTGTGATTTTCTGTGCCTTGGACC
CACAAGACAGGAAGTGGATCAAAGATGGCCCTTCTCAAAGTCTTTGGATTGTGGCCCCGAAGCAGGGCAGT

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[illegible]

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FIGURE 2227

MVKCYHKKYRSATRDVIFRLQFHTGAVQGYGLVFGKEDLDNASKDDRFPDYGKVELVFSATPEKIQGSEHLYNDH
GVIVDYNTTDLIRWDSYENLSADGEVLHTQGPVDGSLYAKVRKKSSSDPGIPGGPQAIPATNSPDHSDHTLSVS
SDSGHSTASARTDKTEERLAPGTRRGLSAQEKAELDQLLSGFLEDPGSSLKEMTDARSKYSGTRHVVAQVHVN
GDAALKDRETDILDDEMPHHDLHSVDSLGLTSSSEGPQSAHLGPFTCHKSSQNSLLSDGFGSNVGEDPQGTLVFPD
LGLGMDGPYERERTFGSREPKQPQLLRKPSVSAQMQAYGQSSYSTQTWVRQQMVVAHQYSFAPDGEARLVSR
PADNPGLVQAQPRVPLTPTRGTSSRVAVQRGVSGSPHPPDTQQPSPSKAFKPRFPDQVVGAGPELSTGPS
PTLDIDQSIEQLNRLILELDPTFEPITHTMNALGSQANGSVSPDSVGGGLRASSRLPDTGEGPSRATGRQGSSAE
QPLGGRLRKLSLGQYDNDAGGQLPFSKCAWGKAGVDYAPNLPPFPSPADVKETMTPGYPQDLIDIGRILSSKES
MCSTPAFPVSPETPYVKTALRHPPFSPPEPPLSSPASQHKGGREPRSCPETLTHAVGMSESPIGPKSTMLRADAS
STPSFQQAFASSCTISSNGPGQRRESSSAERQWVESPSPKPMVSLGSGRPTGSPLSAEFSGTRKDSFVLS
SELPAPFHSHELSLAEPDLSLAPPSSQAFLGFGTAPVGSGLPPEEDLGALLANSHGASPTPSIPLTATGAADNGF
LSHNFLTIVAPGHSSHHSPGLQGQGVTLPGQPPLPEKKRASEGDRSLGSPSSSGFSSPHSGSTISIPFPNVLPD
FSKASEAASPLPDSFGDKLVIVKFVQDTSKFWYKADISREQAIAMLDKKEPGSFIVRDSHSFRGAYGLAMKVATP
PPSVLQLNKKAGDLANELVRHFLIECTPKGVRLKGCSNEPYFGSLTALVCQHSITPLALPCKLLIPERDPLEEIA
ESSPQTAANSAAELLKQGAACNVWYLNSEVESLTGHQAIQKALSITLVQEPPEPVSTVVHFKVSAQGITLTDNQR
KLFFRRHYPVNSVIFCALDPQDRKWKIDGPSSKVFGEFVARKQGSATDNVCHLFAEHDPEQPASAIVNFVSKVMIG
SPKKV

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FIGURE 2228

GGCACGAGGCACAGCTTCGCGCCGTGTACTGTGCGCCCCATCCCTGCGCGCCAGCCTGCCAAGCAGCGTGCCCCG
GTTGCAGGCGTCAATGCAGCGGGCGCGACCCACGCTCTGGGCGGCTGCGCTGACTCTGCTGGTGCTGCTCCGCGGG
CCGCCGGTGGCGCGGGCTGGCGCGAGCTCGGGGGGCTTGGGTCCCCTGGTGCGCTGCGAGCCGTGCGACGCGCGT
GCACTGGCCCACTGCGCGCCTCCGCCCGCCGTGTGCGCGGAGCTGGTGCGCGAGCCGGGCTGCGGGCTGCTGCCTG
ACGTGCGCACTGAGCGAGGGGCCAGCCGTGCGGCATCTACACCGAGCGCTGTGGCTCCGGCCCTTCGCTGCCAGCCG
TCGCCCCAGCAGGCGCGACCGCTGCAGGCGCTGCTGGACGGCCGCGGGCTCTGCGTCAACGCTAGTGCCGTCAGC
CGCCTGCGCGCCTACCTGCTGCCAGCGCCGCCAGCTCCAGGAAATGCTAGTGAGTCGGAGGAAGACCGCAGCGCC
GGCAGTGTTGGAGAGCCCCGTCCGTCTCCAGCACGCACCGGGTGTCTGATCCCAAGTTCCACCCCTCCATTCAAAG
ATAATCATCATCAAGAAAGGGCATGCTAAAGACAGCCAGCGCTACAAAGTTGACTACGAGTCTCAGAGCACAGAT
ACCCAGAATCTCTCCAGAGTCCAAGCGGGAGACAGAATATGGTCCCTGCCGTAGAGAAATGGAAGACACACTG
AATCACCTGAAGTTCCCTCAATGTGCTGAGTCCCAGGGGTGTACACATTCCCAACTGTGACAAGAAGGGATTTTAT
AAGAAAAAGCAGTGTCGCCCTTCCAAAGGCAGGAAGCGGGGCTTCTGCTGGTGTGTGGATAAGTATGGGCAGCCT
CTCCCAGGCTACACCACCAAGGGGAAGGAGGACGTGCACTGCTACAGCATGCAGAGCAAGTAGACGCCTGCCGCA
AGGTTAATGTGGAGCTCAAATATGCCTTATTTTGCACAAAAGACTGCCAAGGACATGACCAGCAGCTGGCTACAG
CCTCGATTTATATTTCTGTTTGTGGTGAAGTATTTTTTTAAACCAAAGTTTAGAAAGAGGTTTTTGAAATGCC
TATGGTTTCTTTGAATGGTAAACTTGAGCATCTTTTCACTTTCCAGTAGTCAGCAAAGAGCAGTTTGAATTTTCT
TGTCGCTTCCATCAAAATATTAGAGACTCGAGCACAGCACCCAGACTTCATGCGCCCGTGGAATGCTCACCAC
ATGTTGGTGAAGCGGCCGACCACTGACTTTGTGACTTAGGCGGCTGTGTTGCCTATGTAGAGAACACGCTTAC
CCCCACTCCCCGTACAGTGCGCACAGGCTTTATCGAGAATAGGAAAACCTTTAAACCCCGGTATCCGGACATCC
CAACGCATGCTCCTGGAGCTCACAGCCTTCTGTGGTGTCAATTTCTGAAACAAGGGCGTGGATCCCTCAACCAAGA
AGAATGTTTATGTCTTCAAGTGACCTGTACTGCTTGGGGACTATTGGAGAAAATAAGGTGGAGTCTACTTGT
AAAAAATATGTATCTAAGAATGTTCTAGGGCACTCTGGGAACCTATAAAGGCAGGTATTCGGGCCCTCCTCTC
AGGAATCTTCTGAAGACATGGCCCAGTCGAAGGCCAGGATGGCTTTTGCTGCGGCCCGTGCGGGTAGGAGGA
CAGAGAGACAGGGAGAGTCAGCCTCCACATTAGAGGCATCACAAGTAATGTCACAATCTTCGGATGACTGCAG
AAAATAGTGTTTTGTAGTTCAACAACCTCAAGACGAAGCTTATTTCTGAGGATAAGCTCTTTAAAGGCAAAGCTTT
ATTTTCATCTCTCATCTTTTGTCTCCTTAGCACAAATGTAAAAAGAATAGTAATATCAGAACAGGAAGGAGGAA
TGGCTTGCTGGGGAGCCCATCCAGGACACTGGGAGCACATAGAGATTACCCATGTTTGTGAACTTAGAGTCAT
TCTCATGCTTTTCTTTATAATTACACATATATGCAGAGAAGATATGTTCTTGTTAACATTGTATACAACATAGC
CCCAAATATAGTAAGATCTATACTAGATAATCCTAGATGAAATGTTAGAGATGCTATTTGATACAACGTGGCCA
TGACTGAGGAAAGGAGCTCACGCCAGAGACTGGGCTGCTCTCCCGAGGCCAAACCCAAGAAGGTCTGGCAAAG
TCAGGCTCAGGGAGACTCTGCCCTGCTGCAGACCTCGGTGTGGACACACGCTGCATAGAGCTCTCCTTGAAAACA
GAGGGGTCTCAAGACATTCTGCCTACCTATTAGCTTTTCTTTATTTTTTTAACTTTTTTGGGGGGAAAAGTATTTT
TGAGAAGTTTGTCTTGCAATGTATTTATAAATAGTAAATAAAGTTTTTACCATTAAAAAATAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2229

MQRARPTLWAAALTLLVLLRGPVVARAGASSGGLGPFVVRCEPCDARALAQCAPP PAVCAELVREPGCGCCLTCAL
SEGQPCGIYTERCGSLRCQSPDEARPLQALLDGRGLCVNASAVSRLRAYLLPAPPAGNASESEEDRSAGSVE
SPSVSSTHRVSDPKFHLPLHSKII I IKKGHAKDSQRYKVDYESQSTDTONFSSSEKRETEYGPCRREMEDTLNHLK
FLNVLSPRGVHIPNCDKKGFYKKKQCRPSKGRKRGFCWCVDKYGPPLPGYTTKGKEDVHCYSMQSK

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FIGURE 2230A

GCGGGTGTTGCGCTACGTACTGGGGCGCTACAGTACCTGGAGCTGGGCAGTCTTCTCATCAGAGTGGGGACTAA
TAACAGTGACCTCCCCGCCAGGTCTGTGTGTGCCGGCTGAAGAAGGATGATGATTATTTCCACCTTCTGAGA
GACAAAGACCAACGAGCCACCACAGCCACCAGTCCCAGAACCCGCCAATGCTGGGGAACGGAAAATGAGGGAGTT
CAACTCTGGCCCTCACAATCCAGTGGAGGAGACGAACTCATCTGCCTCTGTCCCTCTGGGCACGCTTCATGCCA
GGTGCATCTGTGGACAGGGGCCATGCTCCTGGGCTTCCAAAGTTGGAGAAAGCTGCCAGGCTCAGAGCCACCTAA
GCTGAAGATTCCCTTGAGAACAGTACTGTCTGTGGTTTCATGGCCTTTCTTCCATTTGTGGTTCTTGTGAAGT
GGAATTTAAATGACATCTTATCAAGATGGATAAACCTAGTTTCCCAGTGTCTGGAATATAGAAAATGGATGGACA
AGTAAATCCCACTCATCACCCTAGTCCAGGCATGGGGACCTCAACACACCTGAGCCCCAGACATCACCTTTCAT
TCTGGACCTACCATGAAAGACTTCTGAATCCAGGAAGAGAGACTGACTGGGCAACATGTTGTTTCAGAAAACAGGAC
CTTGCCCTGTCAATTTAGGATGGAGTTCAGTGGTCCATCATGGCTCATTGTAGCCTCAAACCTCCAGGCTCAAGC
AATCCTACCATGTGAGCCTTCCCAGTAGCTGGGACTACAGCTGGATCTACCATGAAAGACTTCTGAATCCAGGAA
GAGAGACTGACTGGGCAACATGTTATTTCAGGGTCTCCCTCTCTTGTCCAAGGCTGGAGTGTAGTAGTGTATCAC
AGCTGACTGCAGCCTCAACCTTCCAGGCTGAAGCGATCTCCCATCTCAACCTCCCAGTGGCTGAGACTATAGG
TGCTTGCCACTATGCCAACATAATATTTGGAATTTTCTATACGTGGATTCCAGAGGGGTGACAGCGAAACGTGA
GACCATCCAGTTGCAGAAAAACAAGCTTAACACGCCCACTGATTCTACATTATGCCCTACCTCCCGGCAGCCTC
TCCAGGCCCAGAACCTTCTCCAGTCAAGCTTCCACAGACCAAGCTCATGACTCACAATGGCCTATTTAGGCCATA
CCCTACCTCACGGCAGTCTCTGCAGATGAGGCTACTGCCTCACACAGCCTCCACAGGCACAGCTCCACCGTTAC
AATGGCCTCTTTAGACCCAGCTCCTGCCTCCCAGCCTTCTCTCCAGGCCCTGAGCTTTCTCAAGTCGACCTCAC
AGGCCAGCTCATGCTTCTTGGCAGCCTCTCCAGGCCAGCTCCTGCATCTTGGCAGCCTCTCCAGGCCAGCCT
CTGCCCTCTGTGAGCCTCTACAGTCCCAACATCTGCCTCACAGCAGATTCTTCAGGCCAGTACTTGCCCTACTG
TGGACCACCCAAGCCAAGCTCCCAACCTTTCAGCAGCTTCTACACACCCAGCTCCTGCCACCCAGCTGGCCTCTTT
AGGCCAAGCTCATGCCTCACAAGGGCCTTTCAGGCCCAACTTTTGTCTCATGGCAACCTTCCCTGGCCACATTC
CTGCCTGTCTCCAGCAGCCTAGACAGGCCAGGTCTTGCCCTCACACTGGCCTGTCTACATCCAGCTCTTGCCCTC
ACGGTGGCCTCTCCAGGCCAGCTCCTGTCCAGGACGTCTCTCCAGGCCAAAACCTTCTCAAGTCAGCCTCT
CTAGTCCCAACTGCTGCCTCCTGGTGGCCTATGAAGGCCAAAATCTCTCAAGTTGACCTCTCCAGGCCAGCT
CCTGCCTCCTGTGAGCCTCTACAGGCCCAACCTCTGCCTCATGGGGCTTCTCCAGGCCAGCTCTTCTCTGGG
CTGAGTCTACAGGCACAACCTGCTGCCTCACAACAGCCTTTTTTGGGCCAGTTCTGTCCAGCTCACAGCGACCAA
TGTAGGCCCAAACTTCTCAAGTCAAACCTCTCCAGGCCTGCCTTCTTCTGGTGGCATGAACAGGCCAGCTTT
GACTTGAGAACAGCCTCTGCAGGCCCTGCTCTTGCCCTCCAGGGGCTTCTCCAGGCCAGCTCTTGCCCTCATGGC
GGCTGCCCCAGGCCAAGTTTCTGCCTGCCTGCCAGCAGCCTCAACAGGCACAGCTCTTCCCTCACAGTGGCCCAT
TTAGGCCCAACTCATGACTGTGCGGCCATTTCCAGGCCTAGTGCCTGCCTCCTGGCTGACTCTTGAAGCCCAAAA
CCTCTCAAAATCAGCCTTTTGCCCAACTTCTGTCTACTGTGCGACTCTACAGGCCAGCCTCTGCCTCACAGTGA
CCCTCCAGACCCAGATGGTGTCTACTGTGGCATCCTCAGGCGAAGCTCCTGCCTTTTACAGCAGCCTCTACGGGCC
CAGCTCCTGCCTTGCAATGGCCTCTTTAGGCCAAGCTCATGCCCCACGGCGACTTTTCCAGGCACAGCTTTTGCC
TTTTGCAGCCTGTCCAGGCCAGAATGTCTTAACCTCGGCGTCTCCAGGACGAGCTCATCTCCAGTGCCTCTA
CAGGCCCGTCTCCTGCCTCACAACAACCTCCTTTGGTCCAACCTCCTGCTGAGCTGCTTGGCAGCCTCTGTAGGCC
ACAGAGTTCTTAAAGTAAAGCTTTTCCAGGCCACCTTCGGCCTCCCGGCAGCTCAGCAATCAAACCTATTCCCTC
ACTGGGCCACCGAAAGCCAAGTTTCTCCCTGCCTCACAGCATCCTCCGAAAACCTGAGCATTTCCTCACGGTGG
CCTCCCCAGGCCACGAATCTGCCTGCCTCCCAGGCAGCTGCTGCCTCACAATGGTCTCTTTAGGCCAGCTCTTG
CTAAAGAGACAGACTCTCCAGGCACAGCTCTTGCCCTCTGGCAGGCTCTGCAGGCCCAAACTTCCAAAAGTTGGC
CTCTCCTAACTCAGCTCCTGCCTCATGTGCGCTACACAGGCCAGACTCTTACCACACAGTAGACCCTCCAGGC
CCACCACTTGCCCTGAGCATAGCTCCTAAGGCCAAGCTCCTGCCTTTTGGCAGCCTCTACAGGCCAGCTCCTGC
CTCGCAATTGCCTTTGTAGGCCAAGATCATGCCGGAAGTGGCCTTTCTAGCCTAACTTTTGCTTTTGTAGCGCA
TACTCCGGTCCCAAACTTCTCCAGTCAGCCAGTCCAGGCCAAGCTCTTCTCCAAAGGCTTCTGCAGGCCAA
AATCGTCTGAAGTCACCTCTGCAGGCCAGCTCCTGCCTCCAAGTGTGTAGGCCAAGCTAATGCCTCACA
GCACACTTTCCAGGCTGAGCATTTCTTTTGTGCATCCTCTCAAGCCCTGAACCTTACTCCAGTTGGCCTCTCCA
GACCAAGCTCTCCCTCCAGTGGCCTCTACAGGCCAAAATGTCTCAAGTCAGCCTCTCCAGGCCAACTCCTA
GCTACCGGTGGCTTCTGCAGGCCAAAATCGACCTCAAGTCAGCCTCTTACACCCAGCTCTTGTCTGTAAGTGGC

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FIGURE 2230B

CTCTGCAGGAGCAAACTGCCTCAAGTCGGCCTCTCCAGGCCAGCCTCCTGCTTCCCGAGGGCATGTACAGGCC
CAGCCTCTGCCTCACAGCAGACTCTCCATGCCCAGCTCTTCCCTGTCTGCTGCCTCTCCAGTCCAAAGCTGCGCC
TGCCTTTCGGCAACTTGTACGGGCCCAGCTCCTCCCTCACGGTGGCCTCTTTTCGCCCAACTCATGCCTCTTGCA
ACCTGCCCAAGTGTACAGTCCTGCCTCACACTGGCCTCTTGAGGCTCAGCTCATGCCTCTCGTGGCCTCAACGGG
CCCAGCCCCTGCCTGTCGGCGGCCTCTACAGGCCAGCCTCTACCTCACAGTGGGCTCTCCAGGCCACCTCTTT
CTCACCGTGGCCTCCTGGGGCAATGCTCCCCGCTCTCGGGAGCCTCTGCGGGCCCAGCTCCTGCCTCCCAGTGGC
CTCTGTAGGCCAAGCCCGTGCCTCAGGGCAGCCTTTCCAGGCCTAGCGTTTGCTGCTTTGCATCCTCTCCAGGCT
CTGGACTTCTCCAGTCGGCCTCTCCAGGCCAGCTCTTCCCTCCCGGCGGCCTCTGCAGGCCAGACTGTTGTCA
AGTCGGCCTGTCCAGGGCCAGCTCCTGCCTCCCGGTGCCCTCTGCAGGCCCAAGTCGTCTCAAGTCGGCCTCCC
CAGGCCAGCTCCGGCCTCTCGGCGGCCGCTCCAGGTGCAAAAGTTCTCGAGTCAGCCTCTCCAGGCCAGCTC
CTCCTGCCTCCCAGCGGCCTCTTTCGGCCCAGCCCAGCTCATGCCTCCCGGTGCGTCTCTAGGCCCGACTCCGG
CCTCCCAACAACCTCTTTGGACTCAGCTCCTGCCTCTCGAAGGCCTGCACGGGCCCAGCCTCAGCCTCACAGCGG
ACTCTCCACGCCAGCTAGCTCTCGCCTCACTGCGGCCTCCCCAGTCGAAAGCTCCTGCCTTTCGGCCGCTTTGG
CAGGCCAGCTCCTGCCTGCCAGTGGCCTCTTAGGCCAGCTCATTCCTCACAACGGCCTTTCAGGCCCGTT
TTTCCCTTCCGGCAGCCTTTTGGCCTCTAATTGTTTATCTTTTGTGTATAAATCCCAAAATATGGAATTTTGA
ATATTGCTACCATT

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FIGURE 2231

MLLPGLSLRPRTFSSQPLQTKLMTHNGLFRPIPYLTAVSADEPTASQQPPQAQLHRYNGLFRPSSCLPAFSPGP
ELSQVDLTRPSSCFFAASPGPAPASWWPLQAQPLPPVGLYSPNICLTADSSGPASASLWTPQAKLPTFQQLLHTQ
LLPPSGLSRPSSCFTRAFAGPTFVSWQPSLARFLLVSQQPRQAQVLPHTGLSTSSSCLTLASPGPTPVPGRHLRA
QNLLKSDSLVPTAAFWWPMKAQNLLKLTSPGPAPASCQHLQAQPLPHGVFSRPTSSSWLGLQAQLLPHNSLFWPS
SCPAHGGQCRPKTSSSQTLQAHLLLPGGMNRP SFDLRTASAGPALASQGLFPGPALASWQLPEAKFLLACQQPQQ
AQLLPHSGPFSPNS

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FIGURE 2232A

GGGAAGCGCGCCGCGCACCTCATGGTTCCGGGGACAGTTAGGGCGGCGGATGGAGGTCAGCGGTGGTGCTCGCTG
CGGTTTGAATCACTTGCTAGGAGTCTTGCTCTCTGCCCACCCAGGACATCATGGCAGCTCACCTGGTAAAGCGA
TGACAGTGCCCTCTGAGAGAAGCTGCTCGTCAGGCCCCCTGCCATGGCTCCAGTTGGCCGACTGAGACTTGCCCTGG
GTAGCCCATAAAGACTCTGACTTCTCAGCCACCTCACCCATTTCCACCTCCCAGGTTCCCTTGATGGAGCCGGTG
GAGAAGGAACGAGCATCTACTCCCTACATAGAGAAGCAGGTGGACCACCTCATCAAGAAGGCCACAAGGCCAGAG
GAGCTCCTGGAGCTACTTGGTGGCAGTCACGACTTGGACAGCAATCAAGCAGCAATGGTACTTATCCGGCTCTCT
CACTTGCTGTCTGAGAAGCCAGAAGATAAAGGCTTGCTCATACAGGATGCCCACTTTTCATCAACTTCTCTGTCTG
CTCAACAGTCAGATTGCCTCGGTCTGGCATGGTACCCTCTCGAAGCTGCTGGGAAGCCTGTATGCTCTGGGCATC
CCCAAGGCCTCCAAGGAGCTGCAGTCGGTGGAGCAGGAGGTCCGCTGGCGCATGCGGAAGCTCAAGTACAAGCAC
CTGGCCTTCTGGCAGAGTCTGTGCCACCCCTCTCACAGGAGCAGCACTCGCAGGAGCTGCTGGCTGAGCTGCTC
ACACACCTGGAAGGCGTTGGACAGAAATTGAAGATTCCCACACATTAGTGACCGTCATGATGAAGGTGGGACAC
CTCTCGGAGCCACTAATGAACCGCTTGAAGACAAGCAGTCTCTGAACAGAGCGCAGGACATCACCTGCCCCAC
CTGTGCAGCGTACTTCTGGCTTTTGGCGCTCTGAACCTCCATCCAGACCAAGAGGATCAGTTCTTCAGCCTGGTA
CATGAGAAGCTGGGGTCAGAGCTGCCAGGCCTGGAGCCAGCCCTGCAGGTGGACCTGGTGTGGGCCCTGTGTGTG
CTGCAGCAGGCACGGGAAGCAGAGCTGCAAGCCGTCTCCACCCCTGAATTTACATCCAATTTCTAGGGGGCAAG
TCTCAGAAGGATCAGAACACCTTCCAGAAGCTGCTCCACATCAACGCCACTGCCCTGCTGGAGTACCCCGAGTAC
TCGGGTCCCCCTTCTGCCTGCCTCGGCTGTGGCCCCCTGGGCCCTCAGCCCTTGACAGGAAGGTGACCCCCCTGCAA
AAGGAGCTGCAGGAGACGCTGAAGGGGCTGCTGGGGAGCGCCGACAAGGGCAGCCTCGAGGTGGCCACGCAGTAT
GGCTGGGTGCTGGATGCTGAGGTGCTGCTGGACAGTGACGGCGAGTTTCTGCCCGTAAGGGACTTTGTGGCACCT
CACCTTGCCAGCCAACTGGGAGCCAGTCACCACCTCCAGGGTCTAAGAGGCTAGCGTTCTTGCGGTGGGAGTTT
CCCAACTTCAACAGCCGAAGCAAGGACTTGCTGGGTGCTTTGTCTGGCCCCGGCGACACATAGTGGCTGCAGGC
TTCTGTATAGTGGACGTCCCATTTCTATGAGTGGCTGGAATCAAGTCTGAATGGCAGAAAGGCGCTACCTCAAG
GACAAGATGCGCAAAGCGGTGGCTGAGGAGCTGGCCAAGTGAACCTTGTCGCCAGCAGCATGGACTGCGTGCCTCTCC
GCCGGAGGTCTAGCTGTGGGCGGCCAAGAAGGGTCAACCTTGAGGACAAACCTCTGTGCAGGACCTTGCCAGAG
TGGGGAGGGTGGCCAGCCACTCTGAGGGACAGAACGTCTCTGTGTATAATAAACCTTTAATTTTGGTGTGGAA
CCCCCTGGGGCCTTCCCAGGCTTGGTCACCTCTGCACTGTGACACTTGTCTGTCTGCTTTGTTGAGCAGGGCGT
GGTTCTCCAGTCTGCCCTGTGCACTCCCCCGCCACGCCAGCCCAAGAGGGCTGCTTTAGGGACAGACCTGGGTT
GTTACCTGCCCTGTCTCTCCAGCTTCTTCCCTCCATGAGTGCTTATTCACATATGCCGGCCTCTTGCGTAGGGGT
CTGTATCAGCCCCAGCAGGCAGGTGGAGTCTTAGAATCTGAACCTCCAGAGCAGAGGAGCTTCCCAGGGAAGCT
GATTGGAGATTAGTGCATGGCTGGGGGTTCTGATGGAGCTGTGGCTACTGAACCACAGCCATCCTGGGAGGCTT
TCTCCCATCAGTTGTCTCACACTTAGCTGAGTGAAAGGCACCTTGACAGCATGTGGTGACAGGTGATGTGAGGGC
TGGGTGAGCACTTGGGAGGCGCTGGCTCTGGGAGAGGAGCAAGATCCCCTTGGCTGACACCACGGCACCAAGAGC
CAAACCTCCATCGTTGTCTTACCACCTTGACCAGGCTTGTGCTGTCATCTAGGAACTGGCTGCCCCAAACAGGA
CCCTGGCAGCCTCCCTGCTGCGGGGATTACCAGGTGCTGGGAGGCAACAAGCTTTCTACCTTCCAGCCTCTC
CTTAGAGACACCTATTGGCAGAACCTGACTAAATAGCAGTCAGGGAACCTGGGTTGCCTCCAGCCATACAGAACAG
AGAGTAGGACAGTGGGGTGGAGCTGAGATGGAGAGGCCACAGCCCTCAGCACTGTAGGCTCCCAACCTTAGGCT
GTTTCCCCAAAAAGAAAAAGTCTAGTCACTGCTCTGATGCTTGGCCACTCACCCAAGCATTGGGGTAGTTGTGC
TGGCTTCACTGGGCACCATCAGGCACACCCAGCCTGTAGTTTTTGTATATACCTAAGTCGGCCAGGTGTGG
TGGGATCACGCCTGTAATCCCAGCACTTAGGGAGGCTGGGGCGGGCGAATCGCCTGAGGCCAGGAATCAAGACC
AACCTGGCCAACATTGTGAAACCTGTCTCTACTAAAAATATAAAAAATTAGTCGGGCATGATGACAGGCACCTGT
AATCCCAGCTACTCAGGAGGCTGAGGCAGGTGAATCACTTGAACCCGGGAGGTGGAGGCTGCAGTGAGTTAAGAT
TGTGCCACTGCACTCCAGCCTGGGTAACAGAGCAAGACTCTGTCTCAAAAAATATATATGTGTGTGTGTGTGT
GTATATATATGTACATGTGTATATAAGTATATATGTGTGTATATATGTATATATACAGTATATACACACACACC
CCTAAGTCATGATTTTGGAGCAATTGTAAGTGGTGTAGTGCTTAATTTTGGCATTACACATTGATTGTTAGCAT
ATAGAAATGGGATTGATTTTATGTGATCTTGCTAAACTTTATGCATTTTAAAAATTCCTTTGGATTTCCTATGT
AGATATTTATGTCCTGAAAACAGGAATGTATTTATCCTTTCAAATCAATATGCTTTTATTTTGTATTTATGAC
CACTTCATTAATAATAATTACATGCCATACACTTACCCATTTAAATGTATAATTAGGCCAGGTGTGGTGGC
TCACGTCTGTAATCCCAGCAGTTTGGGAGGCCAAGGCCCTCAGATCTTGAGCCCAGGAGTTCAAGACCACCTTG

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FIGURE 2232B

GCAACAGGCAAAACCCCTGTCTCTATTTTTTTAAATACAAGAATTAGCCGCAGTGGCACGCACCTGTCTGTCCTCCAGC
AACCCAGGAGGCTGAGGTAGGAGGATCACTTAAGCCTGGGAAGTCAAGCCTGCAGTGAACCATGATAGCACCCT
GCAGTCCAGCCTGGGGCGACAGAGTGAGACCCCATCTCGAAAACAAAATGTATAATTCAGTGGTTTTTAGTCTCT
TTGCAGATACATGCAACCATCACCACAATTTGCACATTTTCTAAGCCTCATATACTGATGTGATATTTGGTGTT
TTGTGACTGGCTTCATTTACTTAGCATATTGTTTTTCATGTTTCATTCATGTGCGCATGTATGAGTATTCATTCCTT
TATTTGGCTGAATAATATTCCATTATAGTTTGTGCCACATTTGTTTATCCATTCATCCATTGATGGACATGTGG
ATTGTTTCCACCTTCTGGATAATATGAAGTGAACAGTTTGGATATTTTGTCCCCTCCAAATCTCATGAAATAGG
ATCACCAGTGTTGGAGAATGGGGCCTGTTAGGAAGTGTTTGGATCATAGGAACATCTGTCATAAATGGCTTGGTG
CCATCCTTGTAATGAGTGAGTTCTTGCTCTATATTAGTTCACTTGAAAGCTGGTTGTTGGGAACCTCGCCCTAT
CTGTTCTGCCCTCTCTCGTCATGTGACATGCCTGCTCCTTGTTTACCTTCTGTGATGAGTAAAAGCTTCCTAAGG
CCTTCCCAGGAGCCAAGCAGATGTCAGTACCATGCTTGTACAGCCTGCAGAACTGTGAGCCAAATAAACTTCTTT
ATAAATT

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FIGURE 2233

MAAHLVKRCTCLLREAAQAPAMAPVGRLRLAWVAHKTLTSSATSPISHLPGSLMEPVEKERASTPYIEKQVDHL
IKKATRPEELLELLGGSHDLDNQAAMVLIRLSHLLSEKPEDKGLLIQDAHFHQLLCLLNSQIASVWHGTL SKLL
GSLYALGIPKASKELQSVEQEVWRMRKLKYKHLAFLAESCATLSQEQHSQELLAELLTHLERRWTEIEDSHTLV
TVMMKVGHLSEPLMNRLEDKHVLNRAQDITLPHLCVLLAFARLNPHDPQEDQFFSLVHEKLGSELPGLEPALQV
DIVWALCVLQQAREAELOAVLHPEFHIQFLGGKSQKDQNTFQKLLHINATALLEYPEYSGPLL PASAVAPGPSAL
DRKVTPLQKELQETLKGLLGSADKGSLEVATQYGWVLD AEVLLDSDGEFLPVRDFVAPHLAQPTGSQSPPPGSKR
LAFLRWEFPNFNSRSKDLLGRFVLARRHIVAAGFLIVDVPFYEWLELKSEWQKGAYLKDKMRKAVAEELAK

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FIGURE 2234

GGCACGAGGCCCGGGTCGAGCATGTAGCGGCTGCTGGCGGCGGGGCTCCCGGGGCGGGCCGGGCGGGCCGCGGGA
GCCGCACGCGGCGATATGGAAGAGGAGGGCAAGAAGGGCAAGAAGCCTGGAATTGTCTCGCCATTTAAACGAGTA
TTCTTAAAAGGTGAAAAGAGTAGAGATAAGAAAGCCCATGAGAAGGTGACAGAGAGGCGCCCTCTGCACACTGTG
GTGTTGTCAATTGCCTGAGCGCGTCGAGCCAGACAGACTGCTGAGCGACTATATTGAGAAGGAGGTAAAGTATTTA
GGTCAGTTAACGTCCATACCAGGATACCTGAATCCCTCCAGTAGGACTGAAATCCTGCATTTTCATAGACAATGCA
AAGAGAGCCCAACAGCTTCCGGGACACTTGACTCAGGAGCAGATGCTGTGCTCAGCCTGTCTGCGTACAACGTC
AAGCTGGCCTGGAGGGACGGGGAGGATATCATCCTCAGGGTGCCCATCCATGACATCGCCGCCGTCTCCTATGTT
CGGGATGACGCTGCACACCTGGTGGTCCTGAAGACAGCCAGGACCCAGGGATCTCCCCAGCCAGAGTCTGTGT
GCGGAAAGTTCCAGAGGCCCTCAGTGCAGGCTCCCTGTGCGAGAGTGCAGTTGGGCCCGTGGAGGCATGCTGCCTG
GTCATCCTGGCTGCAGAGAGCAAGGTGCTGCGGAGGAGCTTTGCTGTCTGCTAGGCCAGGTCTTCCAGGTTGTT
TACACGGAGTCCACCATCGACTTTCTGGACAGAGCGATATTTGATGGGGCCTCTACCCCGACCCACCACCTGTCC
CTGCACAGCGATGACTCTTCTACAAAAGTGGACATTAAGGAGACCTACGAGGTGGAAGCCAGCACTTTCTGCTTC
CCTGAATCTGTGGATGTGGGTGGTGCATCACCCACAGCAAGACCATCAGTGAGAGCGAGCTGAGCGCCAGCGCC
ACTGAGCTGCTGCAGGACTACATGCTGACGCTGCGCACCAAGCTGTTCATCACAGGAGATCCAGCAGTTTGCAGCA
CTGCTGCACGAGTACCGCAATGGGGCCTCTATCCACGAGTTCTGCATCAACCTGCGGCAGCTCTACGGGGACAGC
CGCAAGTTCTGCTGCTTGGTCTGAGGCCCTTCATCCCTGAGAAGGACAGCCAGCACTTCGAGAACTTCTGGAG
ACCATTGGCGTGAAGGATGGCCGCGGCATCATCACTGACAGCTTTGGCAGGCACCGGGCGGGCCCTGAGCACCACA
TCCAGTTCCACCACCAATGGGAACAGGGCCACGGGCAGCTCTGATGACCGGTGCGCACCCCTCAGAGGGGGATGAG
TGGGACCGCATGATCTCGGACATCAGCAGCGACATTGAGGCGCTGGGCTGCAGCATGGACCAGGACTCAGCATGA

TGGACAGTGGATGGGGGGGCACCCACACCTTCCGCGCAGTCGTCATAGGCCTTCCCAGAAGGAGCTGCCCAGACC
TGCGTGTTCAGCCCTTGGTGGTGGCCAGGGAGAGGCGCCCGGTGCAGATGGCCCCGGGCGGCCAGGTCTCTACT
GTGAAGGAGCAGGGAGCTGCCGAGGGACACGAGCCTCAGTGCGGGGTGGAAGGCTCTTTGCCTTGTCACCAGGG
CTCAGCCAAGCCCTGCAGTGTGTCCCGCTCGGGGAGGGCCCGGCCGAGCGGGCAGGGAGAGCCAGTCCTGTCCG
CTGGGCCCTTGGACGGCTGTGAGTTTGCACATGATGTTCTATTGTAACCTCAGAGACCTTAAAAAGAAGTTT
ACTGCAATGTGAATAATTTAAAAA

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FIGURE 2235

MEEEGKKGKKPGIVSPFKRVFLKGEKSRDKKAHEKVTERRPLHTVVLSLPERVEPDRLLSDYIEKEVKYLGQLTS
IPGYLNPSSRTEILHFIDNAKRAHQLPGHLTQEHDVLSLSAYNVKLAWRDGEDIILRVPIHDIAAVSYVRDDAA
HLVVLKTAQDPGISPSQSLCAESSRGLSAGSLSESAGVPVEACCLVILAAESKVAAEELCCLLGQVFQVYTEST
IDFLDRAIFDGASTPTHHLSLHSDDSSTKVDIKETYEVEASTFCFPESVDVGGASPHSKTISESELSASATELLQ
DYMLTLRTLSSQEIQQFAALLHEYRNGASIHEFCINLRQLYGDSRKFLLLGLRPFIPKDSQHFENFLETIGVK
DGRGIITDSFGRHRRALSTTSSTTNGNRATGSSDDRSAPSEGDEWDRMISDISSDIEALGCSMDQDSA

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FIGURE 2236

TGGGGTTTCGAACCAGCAAGACAAGCGGGCATTGGCCACAGCAGCGCGAGGCGGGCACGGGGTATTGTCCGGCTCC
GGCGGCGGGCGGTCTGGTGCTGCGAGAGCGGCGGGCGGGCGCGGGTTCGGCAGCGGGAGGGCGCGGGCCGAGCGGA
GGCGGAGTCGGCGCCGAGAACATGGCTGGAGGCAAAGCTGGAAAGGACAGTGGGAAGGCCAAGGCTAAGGCAGTA
TCTCGCTCACAGAGAGCTGGGCTACAGTTTTCTGTGGGCCGCATCCACAGACACTTGAAGACTCGCACCACAAGC
CATGGAAGGGTGGGTGCCACTGCTGCCGTGTACAGTGCTGCGATTCTGGAGTACCTCACTGCAGAGGTGCTGGAG
CTGGCAGGTAATGCTTCTAAGGATCTCAAAGTAAAGCGTATCACTCCGCGTCACTTGCAGCTTGCAATCCGTGGT
GATGAAGAGTTGGATTCTCTTATCAAGGCTACCATAGCTGGGGGTGGTGTGATCCCTCACATCCACAAATCTCTG
ATTGGAAAGAAGGGACAGCAGAAAAC TGCTTAGAGGGATGCTTTAACCAACCCTCTTCCTCCCCGTCATTGTACT
GTAAC TGGGACAGAAGAAATAATGGGGATATGTGGAATTTTTAACAACAGTTAAATGGAAAAGCATAGACAATTA
CTGTAGACATGATAAAAGAAACATTTGTATGTTCTTAGACTCGAAGTTTGATAAAAGTACCTTTTCATGTGGTGA
CAGTTGTGTGTTGATTGGCTAGGTTTTCTCCCGTGTGTTTTATACAAAATGGAATTGATAAACCATTTTTTACAA
AATTAAAAAAAAAAAAAAAAAAAA

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FIGURE 2237

MAGGKAGKDSGKAKAKAVSRQRAGLQFPVGRIHRHLKTRTTSHGRVGATAAVYSAAILEYLTAEVLELAGNASK
DLKVKRITPRHLQLAIRGDEELDSLKATIAGGGVIPHIHKSIGKKGQOKTA

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FIGURE 2238

GTTTTGCAGACGCCACCGCCGAGGAAAACCGTGTACTATTAGCCATGGTCAACCCCACCGTGTTCTTCGACATTG
CCGTCGACGGCGAGCCCTTGGGCCGCGTCTCCTTTGAGCTGTTTGCAGACAAGGTCCCAAAGACAGCAGAAAATT
TTCGTGCTCTGAGCACTGGAGAGAAAGGATTTGGTTATAAGGGTTCCTGCTTTCACAGAATTATTCCAGGGTTTA
TGTGTCAGGGTGGTGACTTCACACGCCATAATGGCACTGGTGGCAAGTCCATCTATGGGGAGAAATTTGAAGATG
AGAACTTCATCCTAAAGCATACGGGTCTTGGCATCTTGTCCATGGCAAATGCTGGACCCAACACAAATGGTTCCC
AGTTTTTCATCTGCACTGCCAAGACTGAGTGGTTGGATGGCAAGCATGTGGTGGTTTGGCAAAGTGAAAGAAGGCA
TGAATATTGTGGAGGCCATGGAGCGCTTTGGGTCCAGGAATGGCAAGACCAGCAAGAAGATCACCATTGCTGACT
GTGGACAACCTCGAATAAGTTTGACTTGTGTTTTATCTTAACCACCAGATCATTCCTTCTGTAGCTCAGGAGAGCA
CCCCCTCACCCCCATTTGCTCGCAGTATCCTAGAATCTTTGTGCTCTCGCTGCAGTTCCTTTGGGTTCCATGTTT
TCCTTGTTCCCTCCCATGCCTAGCTGGATTGCAGAGTTAAGTTTATGATTATGAAATAAAACTAAATAACAATT
GTC

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FIGURE 2239

MVNPTVFFDIAVDGEPLGRVSFELFADKVPKTAENFRALSTGEKGFYKGSCFHRIIPGFMCQGGDFTRHNGTGG
KSIYGEKFEDENFILKHTGPGILSMANAGPNTINGSQFFICTAKTEWLDGKHVVFGKVKEGMNIVEAMERFGSRNG
KTSKKITIADCGQLE

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FIGURE 2240A

GCAGTTGTGAAAACTTCAGGACAAAAATGTTTCATTTAAGGACTTGTGCTGCTAAGTTGAGGCCATTGACGGCT
TCCCAGACTGTTAAGACATTTTCACAAAACAGACCAGCAGCAGCTAGGACATTTCAACAGATTCCGGTGCTATTCT
GCACCTGTTGCTGCTGAGCCCTTTCTCAGTGGGACTAGTTCGAACTATGTGGAGGAGATGTACTGTGCTTGGCTG
GAAAACCCCAAAAGTGACATAAGTCATGGGACATTTTTTTTTTCGCAACACGAATGCCGGAGCCCCACCGGGCACT
GCCTACCAGAGTCCCTTTCCCTGAGCCGAGGCTCCCTGGCTGCTGTGGCCCATGCACAGTCCCTGGTAGAAGCA
CAGCCCAACGTGGACAAGCTCGTGGAGGACCACCTGGCAGTGCAGTCGCTCATCAGGGCATATCAGATACGAGGG
CACCATGTAGCACAGCTGGACCCCTGGGGATTTTGGATGCTGATCTGGACTCCTCCGTGCCCGTGACATTATC
TCATCCACAGACAACTTGGGTTCTATGGCCTGGATGAGTCTGACCTCGACAAGGTCTTCCACTTGCCCACCACC
ACTTTCATCGGGGGACAGGAATCAGCACTTCTCTGCGGGAGATCATCCGTGCGGTGGAGATGGCCTACTGCCAG
CATATTGGGGTGGAGTTTCATGTTTCATCAATGACCTGGAGCAGTGGCAGTGGATCCGGCAGAAGTTTGAGACCCCT
GGGATCATGCAGTTTCAAAAATGAGGAGAAACGGACCCCTGCTGGCCAGGCTTGTGCGGTCCACCAGGTTTGAGGAG
TTCTTACAGCGGAAGTGGTCTCTGAGAAGCGCTTTGGTCTAGAAGGCTGCGAGGTACTGATCCCTGCCCTCAAG
ACCATCATTGACAAGTCTAGTGAGAATGGCGTGGACTACGTGATCATGGGCATGCCACACAGAGGGCGGGCTGAAC
GTGCTTGCAAAATGTTCATCAGGAAGGAGCTGGAACAGATCTTCTGTCAATTTCGATTCAAAGCTGGAGGCAGTAT
GAGGGCTCCGGAGATGTGAAGTACCACCTGGGCATGTATCACCAGGATCAATCGTGTACCCGACAGGAACATT
ACCTTGTCTTGGTGGCCAAACCTTCCCACCTTGAGGCCGCTGACCCCGTGGTGTATGGGCAAGACCAAGCCGAA
CAGTTTTACTGTGGCGACACTGAAGGGAAAAAGGTTCATGTCCATCCTGTTGCATGGGGATGCTGCAATTTGCTGGC
CAGGGCATTGTGTACGAGACCTTCCACCTCAGCGACCTGCCATCCTACACAACCTCATGGCACCCTGCACGTGGTC
GTCAACAACCAGATCGGCTTACCACCGACCTCGGATGGCCCGCTCCTCCCCCTACCCCACTGACGTGGCCCGA
GTGGTGAATGCCCCCATTTTCCACGTGAATCAGATGACCCCGAGGCTGTCTGTACGTGCAAGTGGCGGCC
GAGTGGAGGAGCACCTTCCACAAGGACGTGGTGTGCTGATTGGTGTGTTACCGGCGCAACGGCCACAACGAGATG
GATGAGCCCATGTTTACGCAGCCGCTCATGTACAAGCAGATCCGCAAGCAGAAGCCTGTGTTACAGAAGTACGCT
GAGCTGCTGGTGTGCGAGGGTGTGGTCAACCAGCCTGAGTATGAGGAGGAAATTTCCAAGTATGATAAGATCTGT
GAGGAAGCTTTTGCCAGATCTAAAGATGAGAAGATCTTGACATTAAGCACTGGCTGGACTCTCCCTGGCCTGGC
TTCTTACCCTGGACGGGCAGCCAGGAGCATGTCTGCCCCCTCACGGGTCTGACGGAGGATATTCTGACACAC
ATCGGGAATGTGGCTAGTTCTGTGCTGTGGAAAACTTTACTATTTCATGGAGGGCTGAGCCGGATCTTGAAGACT
CGTGGGGAATGGTGAAGAACCAGGACTGTGGACTGGGCTCTAGCGAGTACATGGCGTTTGGCTCGCTCCTGAAG
GAGGGCATCCACATTCCGCTGAGCGGCCAGGACGTGGAGCGGGGCACATTCAGCCACCGCCACCATGTGCTCCAT
GACCAGAAATGTGGACAAGAGAACCTGCATCCCCATGAACCATCTCTGGCCCAATCAGGCCCCCTATACTGTGTGC
AACAGCTCACTGTCTGAGTACGGCGTGTGGGCTTTGAGCTGGGCTTCGCCATGGCCAGTCTTAATGCCCTGGTC
CTCTGGGAAGCCCAATTTGGTGAATTCACAACACGGCCAGTGTATCATCGACCAAGTTTCATCTGCCCGGGACAA
GCCAAGTGGGTGCGGCAGAATGGCATCGTGTGCTGCTGCCCATGGCATGGAGGGCATGGGTCCAGAACATTCC
TCCGCCCGCCAGAGCGGTTCTTGAGATGTGCAACGATGACCCAGATGTCTGCCAGACCTTAAAGAAGCCAAAC
TTGACATCAATCAGCTATATGACTGCAATTGGGTTGTTGTCAACTGCTCCACTCCTGGCAACTTCTTCCAGTG
CTACGACGCCAGATCCTGCTGCCATTCCGGAAGCCGTTAATTATCTTACCCCCAAATCCCTGTTGCGCCACCCC
GAGGCCAGATCCAGCTTTGATGAGATGCTTCCAGGAACCCACTTCCAGCGGGTGATCCCAAGAATGGCCCTGCA
GCTCAGAACCCAGAAAATGTCAAAAGGCTTCTCTTCTGCACCGGCAAGTGTATTATGACCTCACCCGGGAGCGC
AAAGCACGCGACATGGTGGGGCAGGTGGCCATCACAAGGATTGAGCAGCTGTGCGCATTTCCCTTTGACCTCCTG
CTGAAGGAGGTGCAAGAATACCCCAATGCTGAGCTGGCTGGTGGCAGGAGGAGCACAAGAACCAAGGCTACTAT
GACTACGTGAAGCCAAGACTTCGGACCACCATCAGCCGCGCCAAGCCCGTCTGGTATGCCGGCCGGGACCCAGCG
GCTGCTCCAGCCACCGGCAACAAGAAGACCCACCTGACGGAGCTGCAGCGCCTCCTGGACACGGCCTTCGACCTG
GACGTCTTCAAGAATTTCTCGTAGATGCTGCCTAGGGTTGCTTGGGCCACTGCCCTCTCCACACCCATGACTGCC
CCTTGCTTCTCAACTAAAGAATAGTGCCTCAGCGCTGCCACACACCGCCCTCCTCGCTGTGCCACACCCCTC
CCTCTGCTCTCATAGGAGTTAGGCTGTGCTCCCCCTCCAGTGTGCTTGGCTGCCCCACAGGCCACAGCTGCCAGG
CTCTGCTGACTTCTGAGCAGTTTTCCAGGAGGCCGGGGGAGCAGGAGGAGGAAAGGTAGCCCCCGAGGGATGTC
CTTGGGGAGGGGTGAGCTCTGGCCACAATCTCCCCACAGTCTCACCCTAGGATAGGAAGTGGCCCTTGTGT
GCTGGCTTCCGCTGTACCCAGCAAGGCACAGGCTCCTGTATTTGAGACTAGGATAGCTTCATCTTGAGCCTGAG
CCTTAGAATCTGTAGAGGAGCCTGGAGTCGGATCTAGCCATGGCTGGCAGAGGTTTCTAGGGTGGGCCCCAGCCG

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FIGURE 2240B

TGGCGTGAAGTGAAGGATGACCCGGGGCAGCTGGCAGGAGAGAGCCTTGGCCTGACCTGGCACAGAAAGGGCAGCT
TCAGTCTCTGCAGTGTCCATTATCTGCTGTTTCCTTCGAGGGTTCCAGGCTGTGTGTGGGGCCCAAGCATGCCCCA
CCCACCCCTCCTGGGCCCAGGCAGCACCTGGAGCCCACAGAGTCTGTGTGTAGCCAGGAAGCCCCGCTCAGGTAG
CCACCACCGGGGCACTGGCTGCTCTGTCTTGGTCCTGTTAACCCTCCACCTCCTCTCTTGGACTCCCTCCCCACC
CCAACCACTCTTTCTTTCTCCTTTAACCCAATGGAGACTTTCTGATGCATCGTTTTCTTTGCTGTGCCAAAGCAG
GTCAGAAGAGGGAGAGGAGGGGCTGGGGGTGAGGGGCCAGGCCATGGCCAAGGGGCCAGCTGCCCCCTCATTATC
ACTCTGACCTTCACAGGGACAGATCTGATTTATTTATTTTGGTT

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FIGURE 2241

MFHLRTCAAKLRPLTASQTVKTF SQNRPAARTFQQIRCYSAPVAAEPFLSGTSSNYVEEMYCAWLENPKSVHKS
WDIFFRNTNAGAPPGTAYQSPLPLSRGSLAAVAHAQSLVEAQPNVDKLVEDHLAVQSLIRAYQIRGHHVAQLDPL
GILDADLDSSVPADIISSD KLG FYGLDES DLDKVFHLPTTTFIGGQESALPLREIIRLE MAYCQHIGVEFMFI
NDLEQCQWIRQKFETPGIMQFTNEEKRTLLARLVRSTRFEEFLQRKWSSEKRFGLGCEVLIPALKTIIDKSEN
GVDYVIMGMPHRGRNLNVLANVIRKELEQIFCQFDSKLEAADEGSGDVKYHLGMYHRRINRVTD RNI T LSLVANPS
HLEAADPVVMGKTAEQFYCGDTEGKKVMSILLHGDAAFAGQGIVYETFHLSDLPSYTHGTVHV VNNQIGFTT
DPRMARSSPYPTDVARVVNAPIFHVNSDDPEAVMYVCKVAAEWRSTFHKDVVDLV CYRRNGHNEMDEPMFTQPL
MYKQIRKQKPV LQKYAELLVSQGVVNQPEYEEEISKYDKICEEAFARSKDEKILHIKHWLDSPWPGFFTLDGQPR
SMSCPSTGLTEDILTHIGNVASSVPVENFTIHGGLSRILKTRGEMVKNRTVDWALAEYMAFGSLLKEGIHIRLSG
QDVERGTFSHRHHVLHDQNVDKRTCIPMNLWPNQAPYTVCNSSLSEYGV LGFELGFAMASPNALVLWEAQFGDF
HNTAQCIIDQFICPGQAKWVRQNGIVLLLPHGMEGMGPEHSSARPERFLQMCND DDPDVL PDLKEANFDINQLYDC
NWVVVNCSTPGNFFHVLRRQILLPFRKPLIIFTPKSLLRHPEARSSFDEMLPGTHFQRVIPEDGPAAQN PENVKR
LLFCTGKVYYDLTRERKARDMVGQVAITRIEQLSPFPFDLLLKEVQKYPNAELAWCQEEHKNQGYDYVKPRLRT
TISRAKPVWYAGRDPAAAPATGNKKTHLTELQRLLDTAFDLDVFNFS

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FIGURE 2242

GCTGCTCCCGCTCGCGTCGGTGGCGTTTTTTCCTGCAGCGCGTGCCTGCTGCGCTACTGAGCAGCGCCATGGGAGGA
 CTCTGAAGCACTGGGCTTCGAACACATGGGCCTCGATCCCCGGCTCCTTCAGGCTGTCACCGATCTGGGCTGGTC
 GCGACCTACGCTGATCCAGGAGAAGGCCATCCCACTGGCCCTAGAAGGGAAGGACCTCCTGGCTCGGGCCCGCAC
 GGGCTCCGGGAAGACGGCCGCTTATGCTATTCCGATGCTGCAGCTGTTGCTCCATAGGAAGGCGACAGGTCCGGT
 GGTAGAACAGGCAGTGAGAGGCCTTGTTCCTTGTTCCTACCAAGGAGCTGGCACGGCAAGCACAGTCCATGATTCA
 GCAGCTGGCTACCTACTGTGCTCGGGATGTCCGAGTGGCCAATGTCTCAGCTGCTGAAGACTCAGTCTCTCAGAG
 AGCTGTGCTGATGGAGAAGCCAGATGTGGTAGTAGGGACCCCATCTCGCATATTAAGCCACTTGCAGCAAGACAG
 CCTGAAACTTCGTGACTCCCTGGAGCTTTTGGTGGTGGATGAAGCTGACCTTCTTTTTTCTTTTGGCTTTGAAGA
 AGAGCTCAAGAGTCTCCTCTGTCACTTGCCCCGGATTTACCAGGCTTTTCTCATGTCAAGTACTTTTAACGAGGA
 CGTACAAGCACTCAAGGAGCTGATATTACATAACCCGGTTACCCTTAAGTTACAGGAGTCCCAGCTGCCTGGGCC
 AGACCAGTTACAGCAGTTTCAGGTGGTCTGTGAGACTGAGGAAGACAAATTCCTCCTGCTGATGCCCTGCTCAA
 GCTGTCTATTGATTGGGGCAAGTCTCTGCTCTTTGTCAACACTCTAGAACGGAGTTACCGGCTACGCCGTGTTCTT
 GGAACAGTTACAGCATCCCCACCTGTGTGCTCAATGGAGAGCTTCCACTGCGCTCCAGGTGCCACATCATCTCACA
 GTTCAACCAAGGCTTCTACGACTGTGTCTATAGCAACTGATGCTGAAGTCTGGGGGGCCCCAGTCAAGGGCAAGCG
 TCGGGGCCGAGGGCCCAAAGGGGACAAGGCCTCTGATCCGGAAGCAGGTGTGGCCCGGGGCATAGACTTCCACCA
 TGTGTCTGCTGTGCTCAACTTTGATCTTCCCCCAACCCCTGAGGCCTACATCCATCGAGCTGGCAGGACAGCACG
 CGCTAACAACCCAGGCATAGTCTTAACCTTTGTGCTTCCCACGGAGCAGTTCCACTTAGGCAAGATTGAGGAGCT
 TCTCAGTGGAGAGAACAGGGGGCCCCATTCTGCTCCCCCTACCAGTTCGGATGGAGGAGATCGAGGGCTTCCGCTA
 TCGCTGCAGGGATGCCATGCGCTCAGTGACTAAGCAGGCCATTTCGGGAGGCAAGATTGAAGGAGATCAAGGAAGA
 GCTTCTGCATTCTGAGAAGCTTAAGACATACTTTGAAGACAACCCTAGGGACCTCCAGCTGCTGCGGCATGACCT
 ACCTTTGCACCCCGCAGTGGTGAAGCCCCACCTGGGCCATGTTCTGACTACCTGGTTCCTCCTGCTCTCCGTGG
 CCTGGTACGCCCTCACAAGAAGCGGAAGAAGCTGTCTTCTCTTGTAGGAAGGCCAAGAGAGCAAAGTCCCAGAA
 CCCACTGCGCAGCTTCAAGCACAAAGGAAAGAAATTACAGACCCACAGCCAAGCCCTCCTTGAGGGTTGTTGGGCCTC
 TCTGGAGCTGAGCACATTGTGGAGCACAGGCTTACACCCTTCGTGGACAGGCGAGGCTCTGGTGCTTACTGCACA
 GCCTGAACAGACAGTTCTGGGGCCGGCAGTGCTGGGCCCTTTAGCTCCTTGGCACTTCCAAGCTGGCATCTTGCC
 CCTTGACAACAGAATAAAAAATTTAGCTGCCCCAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2243

MEDSEALGFHEHMGDLPRLLQAVTDLGWSRPTLIQEKAIPLALEGKDLLARARTGSGKTAAYAIPMLQLLLHRKAT
GPVVEQAVRGLVLVPTKELARQAQSMIQQLATYCARDVRVANVSAEDSVSQRAVLMEKPDVVVGTPSRILSHLQ
QDSLKLKRDSELLLVDADLLFSFGFEEELKSLLCHLPRIYQAFMSATFNEDVQALKELILHNPVTLKLQESQL
PGPDQLQQFQVVCETEEDKFLLLYALLKLSLIRGKSLLFVNTLERSYRLRLFLEQFSIPTCVLNGELPLRSRCHI
ISQFNQGFYDCVIATDAEVLGAPVKGKRRGRGPKGDKASDPEAGVARGIDFHHVSAVLNFDLPPTPEAYIHRAGR
TARANNPGIVLTFVLPTAQFHLGKIEELLSGENRGPILLPYQFRMEEIEGFRYRCRDAMRSVTKQAIREARLKEI
KEELLHSEKLKTYFEDNPRDLQLLRHDLPLHPAVVKPHLGHVPDYLVPALRGLVRPHKKRKKLSSSCRKAKRAK
SQNPLRSFKHKGKKFRPTAKPS

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FIGURE 2244

TCTTCCTCGGCGCTGCCTACGGAGGTGGCAGCCATCTCCTCCTCGGCATCATGGCCGCCCTCAGACCCCTTGTGA
AGCCCAAGATCGTCAAAAAGAGAACCAAGAAGTTCATCCAGCACCAGTCAGACCAATATGTCAAAATTAAGCGTA
ACTGGCGGAAACCCAGAGGCACTGACAACAGGGTTCGTAGAAGATTCAAGGGCCAGATCTTGATGCCCAACATTG
GTTATGGGAGCAACAAAAAACAAGCACATGCTGCCCAGTGGCTTCCGGAAGTTCCTGGTCCACAACATCAAGG
AGCTGGAAGTGCTGCTGATGTGCAACAAATCTTACTGTGCCGAGATCGCTCACAATGTTTCCTCCAAGAACCGCA
AAGCCATCGTGGAAACAGCTGCCCAACTGGCCATCAGAGTCACCAACCCCAATGCCAGGCTGCGCAGCGAAGAAA
ATGAGTAGACAGCTCGTGTGCACGTTTTCTGTTTAAATAAATGTAAAACTGC

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FIGURE 2245

GCTGCTCCCTGAGAACGGGTCCCGCAGCTGGGCAGGCGGGCGGCCTGAGGGCGCGGAGCCATGAAGCTGTACAGC
CTCAGCGTCCTCTACAAAGGCGAGGCCAAGGTGGTGCTGCTCAAAGCCGCATACGATGTGTCTTCCTTCAGCTTT
TTCCAGAGATCCAGCGTTCAGGAATTCATGACCTTCACGAGTCAACTGATTGTGGAGCGCTCATCGAAAGGCACT
AGAGCTTCTGTCAAAGAACAAGACTATCTGTGCCACGICTACGTCCGGAATGATAGTCTTGCAGGTGTGGTCATT
GCTGACAATGAATACCCATCCCGGGTGGCCTTTACCTTGCTGGAGAAGGTACTAGATGAATTCTCCAAGCAAGTC
GACAGGATAGACTGGCCAGTAGGATCCCCTGCTACAATCCATTACCCAGCCCTGGATGGTCACCTCAGTAGATAC
CAGAACCCACGAGAAGCTGATCCCATGACTAAAGTGCAGGCCGAAGTAGATGAGACCAAATCATTCTGCACAAC
ACCATGGAGTCTCTGTTAGAGCGAGGTGAGAAGCTAGATGACTTGGTGTCCAAATCCGAGGTGCTGGGAACACAG
TCTAAAGCCTTCTATAAAACTGCCCCGAAACAAAACATCATGCTGTGCCATCATGTGATGCAGCCTGCCAGAGGCC
CAATGCTGGAATGGCACCATCATTCACATCAGAACTGCAGCCCCTGGAAAAGAAGAGACA

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FIGURE 2246

CGGGATGCGGCGCGCCGCGCGTTGAACCTCCTTGGCCTGGGCGAAGCTGTGTGGACCAAGCAAGTCAGGAGTGTG
GCCATGTTTTCTGAGCAGGCTGCCCAGAGGGCCCACACTCTACTGTCCCCACCATCAGCCAACAATGCCACCTTT
GCCCCGGGTGCCAGTGGCAACCTACACCAACTCCTCACAACCTTCCGGCTAGGAGAGCGCAGCTTTAGCCGGCAG
TATGCCACATTTATGCCACCCGCCTCATCCAAATGAGACCCTTCCCTGGAGAACCAGGGCCCAGCAGCACTGGGGC
AGTGGAGTGGGAGTGAAGAAGCTGTGTGAAGTGCAGCCTGAGGAGAAGTGCTGTGTGGTGGGCACTCTGTTCAAG
GCCATGCCGCTGCAGCCCTCCATCCTGCGGGAGGTCAGCGAGGAGCACAACTGCTCCCCAGCCTCCTCGGAGT
AAATACATACACCCAGATGACGAGCTGGTCTTGGAAGATGAAGTGCAGCGTATCAAATAAAAGGCACCATTTGAC
GTGTCAAAGCTGGTTACGGGGACTGTCTGGCTGTGTTTGGCTCCGTGAGAGACGACGGGAAGTTTCTGGTGGAG
GACTATTGCTTTGCTGACCTTGCTCCCCAGAAGCCCGCACCCCCACTTGACACAGATAGGTTTGTGCTACTGGTG
TCCGGCCTGGGCCTGGGTGGCGGTGGAGGCGAGAGCCTGCTGGGCACCCAGCTGCTGGTGGATGTGGTGACGGGG
CAGCTTGGGGACGAAGGGGAGCAGTGCAGCGCCGCCCACGTCTCCCGGGTTATCCTCGCTGGCAACCTCCTCAGC
CACAGCACCCAGAGCAGGGATTCTATCAATAAGGCCAAATACCTCACCAAGAAAACCCAGGCAGCCAGCGTGGAG
GCTGTTAAGATGCTGGATGAGATCCTCCTGCAGCTGAGCGCCTCAGTGCCCGTGGACGTGATGCCAGGCGAGTTT
GATCCCACCAATTACACGCTCCCCCAGCAGCCCCTCCACCCCTGCATGTTCCCGCTGGCCACTGCCTACTCCACG
CTCCAGCTGGTCACCAACCCCTACCAGGCCACCATTTGATGGAGTCAGATTTTGGGGACATCAGGACAGAACGTG
AGTGACATTTTCCGATACAGCAGCATGGAGGATCACTTGGAGATCCTGGAGTGGACCCTGCGGGTCCGTACATC
AGCCCCACAGCCCCGGACACTCTAGGTTGTTACCCCTTCTACAAAACCTGACCCGTTTCATCTTCCAGAGTGCCCG
CATGTCTACTTTTGTGGCAACACCCCCAGCTTTGGCTCCAAAATCATCCGAGGTCTGAGGACCAGACAGTGCTG
TTGGTGAAGTGTCCCTGACTTCAGTGCCACGCAGACCGCCTGCCTTGTGAACCTGCGCAGCCTGGCCTGCCAGCCC
ATCAGCTTCTCGGGCTTCGGGGCAGAGGACGATGACCTGGGAGGCCTGGGGCTGGGCCCCTGACTCAAAAAAGTG
GTTTTGACCAGAGAGGCCAGATGGAGGCTGTTTCATTCCCTGCAGTGTCCGCATTGTAAATAAAGCCTGGCACTT
GCTGATGCG

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FIGURE 2247

MFSEQAAQRAHTLLSPPSANNATFARVPVATYTNSSQPFLGERSFSRQYAHYATR LIQMRPFLENRAQQHWGS
GVGVKKLCELQPEEKCCVVGTLFKAMPLQPSILREVSEEHNLLQP PPSKYIHPDDELVLEDELQRIKLKGTIDV
SKLVTGTVLAVFGSVRDDGKFLVEDYCFADLAPQKPAPPLDTRFVLLVSGLG LGGGGGESLLGTQLLVDVVTGQ
LGDEGEQCSAAHVSRVILAGNLLSHSTQSRDSINKAKYLTKKTQAASVEAVKMLDEILLQLSASVPVDVMPGEFD
PTNYTLPQQPLHPCMFPLATAYSTLQLVTNPYQATIDGVRFLGTSGQNVSDIFRYSSMEDHLEILEWTLRVRHIS
PTAPDTLGCYPFYKTDFFIFPECPHVYFCGNTPSFGSKIIRGPEDQTVLLVTVPDFSATQTACLVNLRSLACQPI
SFSGFGAEDDDLGGGLGLGP

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FIGURE 2248A

TCCCTCGCTCACCCCATCCTCTCTCCCGCCCTTCTGGATTCCCTCACCCGTCTCGATCCCTCTCCGCCCTTT
 CCCAGAGACCCAGAGCCCTGACCCCCGCGCCCTCCCGGAGCCCCCGCGCGTGCCGCGCCATGGCGGCCGT
 GCGCGGGGCGCCCTGCTCAGCTGCCTCCTGGCGTTGCTGGCCCTGTGCCCTGGAGGGCGCCCGCAGACGGTGCT
 GACCGACGACGAGATCGAGGAGTTCTCGAGGGCTTCTGTGAGAGCTAGAACCTGAGCCCCGGGAGGACGACGT
 GGAGGCCCCGCGCCTCCCGAGCCACCCCGCGGGTCCGAAAAGCCAGGCGGGGGCAAGCCAGGGAAGCGGCC
 AGGGACGGCCGAGAAAGTGCTCCGAAAAGACAAAGACAAAGGGAAGAAAGGCAAGAAAGACAAAGGCCCAA
 GGTGCCAAAGGAGTCCTTGGAGGGGTCCCCAGGCCGCCAAGAAGGGGAAGGAGAAGCCACCCAAGGCCACCA
 GAAGCCCAAGGAGAAGCCACCTAAGGCCACCAAGAAGCCCAAGGAGAAGCCACCCAAGGCCACCAAGAAGCCAA
 AGAGAAGCCACCCAAGGCCACCAAGAAGCCCCCGTCAGGGAAGAGGCCCCCATTTCTGGCTCCCTCAGAAACCTT
 GGAGTGGCCACTGCCCCACCCCCAGCCCTGGCCCCGAGGAGTACCCAGGAGGGAGGGGCGCCCCCTCTCAA
 TAACTGGCAGAATCCAGGAGAGGAGACCCATGTGGAGGCACGGGAGCACCAGCCTGAGCCGAGGAGGAGACCGA
 GCAACCCACACTGGACTACAATGACCAGATCGAGAGGGAGGACTATGAGGACTTTGAGTACATTCGGCGCCAGAA
 GCAACCCAGGCCACCCCCAAGCAGAAGGAGGAGGCCCGAGCGGGTCTGGCCAGAGCCCCCTGAGGAGAAGGCCCC
 GGCCCCAGCCCCGAGGAGAGGATTGAGCCTCTGTGAAGCCTCTGCTGCCCCCGCTGCCCCCTGACTATGGTGA
 TGGTTACGTGATCCCCAACTACGATGACATGGACTATTACTTTGGGCCCTCTCCGCCCCAGAAGCCCGATGCTGA
 GCGCCAGACAGACGAAGAGAAGGAGGAGCTGAAGAAACCCAAAAGGAGGACAGCAGCCCCAAGGAGGAGACCGA
 CAAGTGGGCAGTGGAGAAGGGCAAGGACCACAAAGAGCCCCGAAAGGGCGAGGAGTTGGAGGAGGAGTGGACGCC
 TACGGAGAAAGTCAAGTGTCCCCCATTTGGGATGGAGTCACACCGTATTGAGGACAACCAGATCCGAGCCTCCTC
 CATGCTGCGCCACGGCCTGGGGGCACAGCGCGGCCGGCTCAACATGACAGCCGGTGCCACTGAGGACGACTACTA
 TGATGGTGCCTGGTGTGCCGAGGACGATGCCAGGACCCAGTGGATAGAGGTGGACACCAGGAGGACTACCCGGTT
 CACAGGCGTCATACCCAGGGCAGAGACTCCAGCATCCATGACGATTTTGTGACCACCTTCTTCGTGGGCTTCAG
 CAATGACAGCCAGACATGGGTGATGTACACCAACGGCTATGAGGAAATGACCTTTCATGGGAACGTGGACAAGGA
 CACACCCGTGCTGAGTGAGCTCCAGAGCCGGTGGTGGCTCGTTTCATCCGCATCTACCCACTCACCTGGAATGG
 CAGCCTGTGATGCGCCTGGAGGTGCTGGGGTGTCTGTGGCCCCCTGTCTACAGCTACTACGCACAGAATGAGGT
 GGTGGCCACCGATGACCTGGATTTCGGGCACCACAGCTACAAGGACATGCGCCAGCTCATGAAGGTGGTGAACGA
 GGAGTGCCCCACCATCACCCGCACTTACAGCCTGGGCAAGAGCTCACGAGGCCTCAAGATCTATGCCATGGAGAT
 CTCAGACAACCCCTGGGGAGCATGAACGGGGAGCCCGAGTTCGCTACACTGCTGGGATCCATGGCAACGAGGT
 GCTGGGCCGAGAGCTGTTGCTGCTGCTCATGCAGTACCTGTGCCGAGAGTACCGCATGGGAACCCACGTGTGCG
 CAGCCTGGTGCAGGACACACGCATCCACCTGGTGCCCTCACTGAACCCCTGATGGCTACGAGGTGGCAGCGCAGAT
 GGGCTCAGAGTTTGGGAACCTGGGCGCTGGGACTGTGGACTGAGGAGGGCTTTGACATCTTTGAAGATTTCCCGGA
 TCTCAACTCTGTGCTCTGGGGAGCTGAGGAGAGGAAATGGGTCCCTACCGGGTCCCCAACAAATAACTTGCCCAT
 CCCTGAACGCTACCTTTCGCCAGATGCCACGGTATCCACGAGGTCCGGGCCATCATTGCCTGGATGGAGAAGAA
 CCCCTTCGTGCTGGGAGCAAATCTGAACGGCGCGGAGCGGCTAGTATCCTACCCCTACGATATGGCCCCGACGCC
 TACCCAGGAGCAGCTGCTGGCCGAGCCATGGCAGCAGCCCGGGGGGAGGATGAGGACGAGGTCTCCGAGGCCCA
 GGAGACTCCAGACCACGCCATCTTCCGGTGGCTTGCCATCTCCTTCGCCTCCGCACACCTCACCTTGACCGAGCC
 CTACCGCGGAGGCTGCCAAGCCAGGACTACACCGCGGCGATGGGCATCGTCAACGGGGCCAAGTGAACCCCCG
 GACCGGGACTATCAATGACTTCAGTTACCTGCATACCAACTGCCTGGAGCTCTCCTTCTACCTGGGCTGTGACAA
 GTTCCCTCATGAGAGTGAGCTGCCCCGCGAGTGGGAGAACAACAAGGAGGCGCTGCTCACCTTCATGGAGCAGGT
 GCACCGCGGCATTAAGGGGGTGGTGACGGACGAGCAAGGCATCCCCATTGCCAACGCCACCATCTCTGTGAGTGG
 CATTAAATCACGGCGTGAAGACAGCCAGTGGTGGTGGTATTACTGGCGAATCTTGAACCCGGGTGAGTACCGGTGAC
 AGCCACGCGGAGGGCTACACCCGAGCGCCAAGACCTGCAATGTTGACTATGACATCGGGGCCACTCAGTGCAA
 CTTTCATCCTGGCTCGCTCCAACCTGGAAGCGCATCCGGGAGATCATGGCCATGAACGGGAACCGGCCTATCCCACA
 CATAGACCCATCGCGCCCTATGACCCCCAACAGCGACGCTGCAGCAGCGACGCTACAACACCGCCTGCGGCT
 TCGGGCACAGATGCGGCTGCGGCGCCTCAACGCCACCAACACCTAGGCCCCACACTGTGCTCCACGCTGCC
 CCCTGCCCCCTGCCACCACCTGAGCACTACCATAGAGCCCTGGGGCCTCATACCGCCAACCACCGCTGGCTGGGA
 GGAGTCGGAGACTGAGACCTACACAGAGGTGGTGACAGAGTTTGGGACCGAGGTGGAGCCCGAGTTTGGGACCAA
 GGTGGAGCCCCGAGTTTGGAGACCGAGTTTGGAGCCAGCTGGAACCCGAGTTTGGGAAGAGGA
 GGAGGAGGAGAAAGAGGAGGAGATAGCCACTGGCCAGGCATTCCCTTCACAACAGTAGAGACCTACACAGTGAA

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FIGURE 2248B

CTTTGGGGACTTCTGAGATCAGCGTCCTACCAAGACCCAGCCCAACTCAAGCTACAGCAGCAGCACTTCCCAAG
CCTGCTGACCACAGTCACATCACCATCAGCACATGGAAGGCCCTGGTATGGACACTGAAAGGAAGGGCTGGTC
CTGCCCCCTTTGAGGGGGTGCAAACATGACTGGGACCTAAGAGCCAGAGGCTGTGTAGAGGCTCCTGCTCCACCTG
CCAGTCTCGTAAGAGATGGGGTTGCTGCAGTGTTGGAGTAGGGGCAGAGGGAGGGAGCCAAGGTCACCTCCAATAA
AACAAAGCTCATGGC

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FIGURE 2249

GTTTCCCTCTGCGTTTCGCTCCGCGCTGCTGGAGGCTGTCTGTCCTCCAAATGCTCCCCAAACGGCGGCGAGCGCGGGTC
GGGTCCCTTAGCGGCGATGCCGCTTCTTCCACGCCGCCCTCGACGCGCTTCCCGGGAGTCGCCATCTACCTGGTC
GAGCCTCGCATGGGTTCGACGCCGCGGGCCTTCTTCCACAGGCCTGGCGCGCTCCAAAGGCTTCCGCGTCTTTGAC
GCCTGCAGCTCCGAAGCGACACATGTTGTGATGGAAGAGACCTCAGCAGAGGAGGCCGTCAGCTGGCAGGAGCGC
AGGATGGCAGCTGCTCCCCCGGGTTGCACCCCCCAGCTCTGCTGGACATAAGCTGGTTAACAGAGAGCCTGGGA
GCTGGGCAGCCTGTACCTGTGGAGTGCCGGCACCGCCTGGAGGTGGCTGGGCCAAGGAAGGGGCCTCTGAGCCCA
GCATGGATGCCTGCCTATGCCTGCCAGCGCCCTACGCCCCCTCACACACCACAACACTGGCCTCTCCGAGGCTCTG
GAGATACTGGCCGAGGCAGCAGGCTTTGAAGGCAGTGAGGGCCGCTCCTCACCTTCTGCAGAGCAGCCTCGGTG
CTCAAGGCCCTTCCAGCCCTGTACACAACCCTGAGCCAGCTGCAGGGGCTTCCCCACTTTGGAGAACAACCTCTCT
AGGGTTGTCCAGGAGCTGCTGGAGCATGGAGTGTGTGAGGAGGTGGAGAGAGTTCGGCGCTCAGAGAGGTACCAG
ACCATGAAGCTCTTACCCAGATCTTCGGGGTCGGTGTGAAGACTGCTGACCGGTGGTACCAGGAAGGACTGCCA
ACCTTAGATGACCTCCGAGAGCAGCCCCAGAACTAACCACAGCAGAAAGCGGGGCTCCAGCACCACCAGGAC
CTGAGCACCAGCTCCTGCGGTCCGATGTAGATGCCCTGCAGCAGGTGGTGGAGGAAGCTGTGGGGCAGGCCCTG
CCTGGGGCCACCGTCACGCTGACCGGCGGCTTCCGCGAGGGGGAAGTTGCAGGGCCATGACGTGGACTTCTCTATC
ACCCACCCCAAGGAGGGTTCAGGAGGCGGGGCTGCTGCCTAGAGTGATGTGCCGCTGCAGGACCAGGGCCTCATC
CTGTACCACCAGCACCAGCACAGCTGCTGTGAGTCCCCTACCCGCTGGCCCAACAGAGCCACATGGACGCTTTT
GAGAGAAGTTTCTGCATTTTCCGCTACCAACCTCCAGGGGCTGCTGTGGGGGGATCCACGAGGCCCTGCCCA
TCCTGGAAGGCCGTGAGAGTGGACTTGGTAGTTGCACCCGTCAGCCAGTTCCCTTTTCGCCCTGCTCGGTTGGACT
GGCTCCAAGCTTTTCCAGCGGGAGCTGCGCCGCTTCAGCCGGAAGGAGAAGGGCCTGTGGCTGAACAGCCATGGG
CTGTTTGACCCGGAGCAGAAGACATTTTTCCAAGCGGCTTCAGAGGAAGACATCTTCAGACACCTGGGCCTTGAG
TACCTTCTCCAGAGCAGAGAAACGCCCTGAGCCTGCCTGTGTCCCCCACTTCCACTCAGGAAATTGGGCTGCCCC
CAACCTGGCCACTGAATGTCTCCAGGCAGATATGCTGCCCCCTGACCCCCACCTTACCCCTCCCCGCAAGGCC
TGCTCTTCCGGAGGTCAATTGTGCCTGCAGGATCAGTTGAGCCCCCTGCTGGTGTGCTGCAGGGTGTGATGAGGT
GGGAGCCCTCAGTGCCAGCCTCATCACTGTGTGACCCCTGGGTCTGCTCTTAGCCTCCCCATGGCTCACGTTCTG
CCCTGGATGGGATGTGAGTGGGGCCACATCGTGGAGCTGTGGTGGGGCCTGCAGTCATGAATGGCAAGTGGTCC
CTGATGTGCAGTGTCTCATTAGTTGCACTGCAGTTAACTGTGGCTCCTGCAGGGCACCCTGCCAGAAATGCCAG
AAGAGAACCATGCATACCTGCACTGCATTTGAGAGCCATGAGCTGGAGGCTGTGGTTTCGTGCCAGCAAGGAGCCT
ACTGTCTGGTGTGCTGTAGGCATCTGGAGAGGGAGAGGGCCTGGGTAGGAGCTGGGAGGAAGATAATTTTCAACT
ATGGGGCTTCAGTACTGCAGCGCCCCGAGCCAGGCTCTGTGCTTCTGCCTTTAAGGCCTGTTCTCAGCACAATGT
CTCAAAAATAGGTCATATCCTGCCACTCCCGTCGCAGAGCCCTTTAATGGTTCCAAACCCTAAGTCCACACATAG
CCCCTGGCTCTGGCATCTCTCCAGCCCCACTGGCCCCGAGCTGCTTGACTCACCGGCTTCTATTTGATGCACCC
AGGCCCCCTTGTGGCCAACTCCCTCCCTTCTCACTGAGGCAGAAGCACTGAGGTGGGCTGGACATGGGTGCCCT
CCACGTCCCTCATATCCCAGGCACACTCTGGCCTCAGGTTTTGCCCTGGCCATGTCATCTACCTGGAGTGGGCC
CTCCCCCTTCTCAGGCCTTGAATCAAAAGCCACTTTGTAGGCGAGGATTTCCCAGACCACTCATCACATTAAAA
AATATTTTGAAAACATGCAGT

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FIGURE 2250

MLPKRRRARVGSPSGDAASSTPPSTRFPGVAIYLVEPRMGRSRAFLTGLARSKGFRVLDACSSEATHVVMEEETS
AEEAVSWQERRMAAAPPGCTPPALLDISWLTESLGAGQVPVVECRHRLEVAGPRKGPLSPAWM PAYACQRPTPLT
HHNTGLSEALEILAEAAGFEGSEGRLLTFCRAASVLKALPSPVTTLSQLQGLPHFGEHSSRVVQELLEHGVC EEV
ERVRRSERYQTMKLFTQIFGVGVKTADRWYREGLRTLDDLREQPQKLTQQQKAGLQHHQDLSTPVLRS DVDALQQ
VVEEAVGQALPGATVILTTGGFRRGKLQGHVDVFLITHPKEGQEAGLLPRVMCRLQDQGLILYHQHQHSCCESPTR
LAQQSHMDAFERSFCIFRLPQPPGAAVGGSTRPCPSWKAVRVDLVVAPVSQFPFALLGWTGSKLFQRELRRFSRK
EKGLWLNSHGLFDPEQKTFFQAASEEDIFRHLGLELYLPPEQRNA

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FIGURE 2251

GGCACGAGGGCGGAGACTGCGGGGCGGGCCATGCGGGCGAACCTGAGCCGGAACGGGCCAGCGCTGCAAGAGGCC
TACGTGCGGGTGGTCACCGAGAAGTCCCCGACCGACTGGGCTCTCTTTACCTATGAAGGCAACAGCAATGACATC
CGCGTGGCTGGCACAGGGGAGGGTGGCTTGGAGGAGATGGTGGAGGAGCTCAACAGCGGGAAGGTGATGTACGCC
TTCTGCAGAGTGAAGGACCCCAACTCTGGACTGCCCAAATTTGTCTCATCAACTGGACAGGCGAGGGCGTGAAC
GATGTGCGGAAGGGAGCCTGTGCCAGCCACGTGACACCATGGCCAGCTTCTCTGAAGGGGGCCCATGTGACCATC
AACGCACGGGCCGAGGAGGATGTGGAGCCTGAGTGCATCATGGAGAAGGTGGCCAAGGCTTCAGGTGCCAACTAC
AGCTTTCACAAGGAGAGTGGCCGCTTCCAGGACGTGGGACCCAGGCCCCAGTGGGCTCTGTGTACCAGAAGACC
AATGCCGTGTCTGAGATTAAAAGGGTTGGTAAAGACAGCTTCTGGGCCAAAGCAGAGAAGGAGGAGGAGAACCGT
CGGCTGGAGGAAAAGCGCGGGGCCGAGGAGGCACAGCGGCAGCTGGAGCAGGAGCGCCGGGAGCGTGAGCTGCGT
GAGGCTGCACGCCGGGAGCAGCGCTATCAGGAGCAGGGTGGCGAGGCCAGCCCCAGAGCAGGACGTGGGAGCAG
CAGCAAGAAGTGGTTTCAAGGAACCGAAATGAGCAGGAGTCTGCCGTGCACCCGAGGGAGATTTTCAAGCAGAAG
GAGAGGGCCATGTCCACCACCTCCATCTCCAGTCTCAGCCTGGCAAGCTGAGGAGCCCCCTCTCTGCAGAAGCAG
CTCACCCAACCAGAGACCCACTTTGGCAGAGAGCCAGCTGCTGCCATCTCAAGGCCCAGGGCAGATCTCCCTGCT
GAGGAGCCGGCGCCCAGCACTCTCTCATGTCTGGTGCAGGCAGAAGAGGAGGCTGTGTATGAGGAACCTCCAGAG
CAGGAGACCTTCTACGAGCAGCCCCACTGGTGCAGCAGCAAGGTGCTGGCTCTGAGCACATTGACCACCACATT
CAGGGCCAGGGGCTCAGTGGGCAAGGGCTCTGTGCCCGTGCCCTGTACGACTACCAGGCAGCCGACGACACAGAG
ATCTCCTTTGACCCCCGAGAACCTCATCACGGGCATCGAGGTGATCGACGAAGGCTGGTGGCGTGGCTATGGCCG
GATGGCCATTTTGGCATGTTCCCTGCCAACTACGTGGAGCTCATTTAGTTGAGGCTGAGGGCACATCTTGCCCTC
CCCTCTCAGACATGGCTTCTTATTGCTGGAAGAGGAGGCTGGGAGTTGACATTACGACTCTTCCAGGAATAG
GACCCCAAGTGAAGTGAAGCCTCAGGGCTCCCTCCGGCTTGGCAGACTCAGCCTGTACCCCAAAATGCAGCAAT
GGCCTGGTGATTCCACACATCCTTCTGTCATCCCCGACCCCTCCAGACAGCTTGGCTCTTGCCCTGACAGGA
TACTAGCCCAAGCCCTGCCTGTGGCCAAGCCCTGAGTGGCCACTGCCAAGCTGCGGGGAAGGGTCTGAGCAGGG
GCATCTGGGAGGCTCTGGCTGCCTTCTGCATTTATTTGCCTTTTTTCTTTTTCTTTGCTTCTAAGGGGTGGTGG
CCACCCTGTTTAGAATGACCCTTGGGAACAGTGAACGTAGAGAATTGTTTTTAGCAGAGTTTGTGACCAAAGTC
AGAGTGGATCATGGTGGTTTGGCAGCAGGGAATTTGTCTTGTGGAGCCTGCTCTGTGCTCCCCACTCCATTTCT
CTGTCCCTCTGCCTGGGCTATGGGAAGTGGGGATGCAGATGGCCAAGCTCCACCCTGGGTATTCAAAAACGGCA
GACACAACATGTTCTCCACGCGGCTCACTCGATGCCTGCAGGCCCCAGTGTGTGCCTCAACTGATTCTGACTTC
AGGAAAAAGTAACACAGAGTGGCCTTGGCCTGTTGTCTTCCCCTATTTTCTGTCCCAGCTCATCCGTGTCTCTGAA
GAACAAATATGCTTTTGGACCACGAAA

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FIGURE 2252

MAANLSRNGPALQEAYVRVVTEKSP TDWALFTYEGNSNDIRVAGTGEGGLEEMVEELNSGKVMYAFCRVKDPNSG
LPKFVLINWTGEGVNDVRKGACASHVSTMASFLKGAVTINARAEEDVEPECIMEKVAKASGANYSFHKESGRFQ
DVGPQAPVGSVYQKTNAVSEIKRVGKDSFWAKAEKEEENRRLEEKRRAEAAQRQLEQERRERELREAAARREQRYQ
EQGGEAS PQSRTWEQQQEVVSRNRNEQESAVHPREIFKQKERAMSTTSISSPQPGKLRS PFLQQLTQPETHFGR
EPAAAISRPRADLP AE EPAPSTPPCLVQAEEEEAVYEEPP EQETFYEQPPLVQQQGAGSEHIDHHIQGQGLSGQGL
CARALYDYQAADDTEISFDPENLITGIEVIDEGWWRGYGPDGHFGMF PANYVELIE

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FIGURE 2253

GGGGAGAGCGGGTGTGTTGAAGGCTCCGCGGACCGGCACTAGGAGCCGGGGGCGGGTCCGTGACCCCTCCGGCTGCT
CGGAGTGAACAGGCGGCCAGGAAAGAAGCGGGCCTGAACACCATGATCCCTTTGGAGAAGCCAGGCAGCGGGCGG
TCCTCCCCAGGCGCCACCTCAGGCTCGGGCCGGGCAGGCCGGGGTCTGAGCGGGCCGTGCCGGCCGCCGCCGCCG
CCCCAGGCCCCGCGGGCTGCTGACAGAGATACGCGCCGTGGTGCGCACCGAGCCCTTCCAGGACGGCTACAGCCTG
TGCCCGGGCCGGGAGCTGGGCAGGGGGAAATTTGCAGTGGTGAGAAAATGTATAAAGAAAGATTCTGGGAAAGAA
TTTGCTGCAAAGTTCATGAGAAAAAGAAGAAAAGGCCAAGATTGTGCGATGGAAATAATTCATGAGATTGCTGTA
CTTGAAGTACGACAAGACAATCCTTGGGTCATTAATTTACATGAAGTTTATGAGACTGCATCAGAAATGATCTTA
GTTCTGGAATATGCTGCTGGGGGTGAAATCTTTGACCAGTGTGTTGCAGACAGAGAAGAAGCCTTTAAAGAAAAA
GATGTTCAAAGACTTATGCGACAGATTTTAGAAGGTGTTCACTTTTTACACACTCGTGATGTAGTTCATCTTGAT
TTGAAGCCTCAGAATATTCTGTTGACAAGTGAATCTCCATTGGGTGACATTAAGATTGTTGATTTTGGCCTTTCA
AGAATATTGAAGAACAGTGAAGAGCTCCGAGAAATTATGGGTACCCCTGAATATGTGGCTCCTGAAATTTCTTAGT
TATGATCCTATAAGCATGGCAACAGATATGTGGAGCATTGGAGTGTAAACATATGTCATGCTTACAGGAATATCA
CCTTTCTTAGGCAATGATAAACAAGAAACATTCTTAAACATCTCACAGATGAATTTAAGTTATTCTGAGGAAGAA
TTTGATGTTTTGTCTGAGTCGGCTGTTGATTTTCATCAGGACACTTTTAGTTAAGAAACCTGAAGATCGAGCCACT
GCTGAAGAATGTCTAAAGCACCCCTGGTTGACACAGAGCAGTATTCAAGAGCCTTCTTTCAGGATGGAAAAGGCA
CTAGAAGAAGCAAAATGCCCTCCAAGAAGGTCATTCTGTGCCTGAAATTAATTCGGATACCGACAAATCAGAAACC
AAGGAATCCATTGTAACCGAAGAGTTAATTGTAGTTACTTCATATACTCTAGGACAATGCAGACAGTCTGAAAAA
GAGAAATGGAGCAAAAGGCCATTTCCAAACGATTTAAATTTGAGGAACCTTTGCTACAAGAAATTCAGGAGAA
TTTATCTACTGAGCAATATTTCCCTTTAGAACTTCAAGATTTCTACATTGAAAATGTTAATATTATTATGGACC
TCGGGCAAAATGGTACATGTACTGGAAAGTGGAATAACCAGTATCACTTACACAAACAAAAATAACTTTGTCAAATT
TGTGGAGTTAGGTGGAAGCCAGATTTTAAAAGTTGCCAACCAGGAGATTTAACAGGTACAGTTACCCGTTTCAAT
GTTATTTTAAAGAGGAGATGTTGGCACCTTTGAATTCTACATCCTGTTTCTCCAGAATGAGAATTTGTGTACA
AAGATATTTGTATTCATTTCTTTAAAAAATCCAAGTAAAAGTGCCAAAACACTACACTTCTGTAAATCTCTTGCA
TATTCATATGTGTATCTATATCTGCATAATGTTTGTAAATGTCTACTAAAATTGCTACTTTTTCATTTGGATTT
GTTTTTGGCAAAATTTTAGTCTAAACAGACATCTAAATTTTCGAGACTTAGAATAACATTCACTAAAGTTTGATA
ATGTCTTTTTTAAATATTTTCTTACTGCTTTATAGTGACTTGATTTGGTTTCTGTTGTTTTTGCTAAATACT
AGTAACATATCAGTGAAAAACCCTAATTTTTTTTTCTCTCAATGTCACTAGTAAGAGAGGTGGTAATTTTTTACC
TCTGAAATATTCTGGGTTTAGGTGTCAGCTCTTGAGCTGCTTCCCTCATCACACCACACTCACATGCATCTGTT
CTCTCTCACACTCTATACCCCTGCCACTTCCTGGCACCTCCCCCATGCTTGTCATTTAATTTTGGCCACTTGTA
GGTATCAGTGTGATCTGATCAACACTCTGGTTACCTTGGTCAGTGAAAAGATGCTACTATATTGCTTTTGTCCCA
AAGTGAGTAAAATCCCTTAGAGCAG
TGCTGAGTTTCTTATCAGCCCTCAAGCTATGCTAGGAAAAGTTATAAAATGCCAAAATATTTATAAACATTTACT
TTGTCCATAAAAAATTTACATTGGATACTCTGTAAGTAGGAGGTACTTTGTCCCAAAAAGATGTATAAGAATGTA
CTAATAGTTTTATTTGATTAGGATTGAACAGTTCAGTTGTATCTATGCCCCACAGTGACCAGTAAAGTCCAATTA
AAATATGGAAATGTAAAAGTGTATGCCGAATACCTTAAAGTAACTAATTATCCTTACACACAAAAGGCTCAGTGC
ATTAAATATTTGCCTATC

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FIGURE 2254

ATGGGCGAGCGCGGGTACAGCTTTTCGCTGACTACATTACAGCCCGTCTGGTAACTTGTCCAGATTGAATATGCT
 TTGGCTGCTGTAGCTGGAGGAGCCCCGTCCGTGGGAATTAAAGCTGCAAATGGTGIGGTATTAGCAACTGAGAAA
 AAACAGAAATCCATTCTGTATGATGAGCGAAGGTACACAAAGTAGAACCAATTACCAAGCATATAGGTTTGGTG
 TACAGTGGCATGGGCCCCGATTACAGAGTGCTTGTGCACAGAGCTCGAAAAGTAGCTCAACAATACTATCTTGTG
 TACCAAGAACCCATTCTTACAGCTCAGCTGGTACAGAGAGTAGCTTCTGTGATGCAAGAATATACTCAGTCAGGT
 GGTGTTCGTCCATTGGAGTTTCTTTACTTATTTGTGGTTGGAATGAGGGACGACCATATTTATTTTCAGTCAGAT
 CCATCTGGAGCTTACTTTGCCTGGAAAGCTACAGCAATGGGAAAGAACTATGTGAATGGGAAGACTTTTCTTGAG
 AAAAGATATAATGAAGATCTGGAAGCTGAAGATGCCATTACATACAGCCATCTTAACCCTAAAGGAAAGCTTTGAA
 GGGCAAATGACAGAGGATAACATAGAAGTTGGAATCTGCAATGAAGCTGGATTTAGGAGGCTTACTCCAAGTAA
 GTTAAGGATTACTTGGCTGCCATAGCATTAACAATGAAGTGACTGAAAAATCCAGAAATTTAGATAATCTATCTAC
 TTAAACATGTTTAAAGTATGTTTGTGTTTGCAGACTTTTGCATACTTATTTCTACATGGTTTAAATCGACTGTT
 TTTAAATGACACTTATAAATCCTAATAAACTGTTAAACCC

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FIGURE 2255

MAERGYSFSLTTFSPSGKLVQIEYALAAVAGGAPSVGIKAANGVVLATEKKQKSILYDERSVHKVEPITKHIGLV
YSGMGPDYRVLVHRARKLAQQYYLVYQEPIPTAQLVQRVASVMQEYTSQGGVRPFGVSLICGWNEGRPYLFQSD
PSGAYFAWKATAMGKNYVNGKTFLEKRYNEDLELEDAIHTAILTLKESFEGQMTEDNIEVGICNEAGFRRLTPTE
VKDYLAATA

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FIGURE 2256

GCTCGGCGCCCTCTTCCCTGCAAACCATGTTTGCCAAAGGCAGAGGCTCGGCGGTGCCCTCGGATGGGCAGGCTT
GGGAAAAGTTAGCTTCATACGTCTACGAATATTTACTGCACGTAAGAGTACAGAAATCTGCAGAGACCTTCTTGT
CGGAGATTTCGATGGGAAAAAACATCACGTTGGGAGAACCGCCTGGGTTTTTGCACTCGTGGTGGTGTGTATTTG
GGGACCTTTACTGTGCAGCTCCTCAAAGGAGAGACACTTGTGAACATTCAAGTGAAGCAAAAGCCTTTCATGATT
ATAGTGCAGCAGCTGCCCCGAGCCCCGTGCTTGGCAACATTCCCCCAACGATGGGATGCCGGGAGGCCCCATCC
CGCCAGGTTTCTTTCAGGGTCCTCCGGGGTCACAGCCCTCGCCGCACGCACAGCCTCCACCTCACAATCCTAGCA
GCATGATGGGACCCACAGTCAGCCTCCGGGAGGAGTTCTTGGGACACAGCCATTGCTGCCCAATTCTATGGATC
CCACACGACAACAAGGCCACCCCAACATGGGAGGATCAATGCAGAGAATGAACCCTCCCCGAGGCATGGGGCCCA
TGGGTCCCGGCCCCACAGAATTACGGCAGCGGCATGAGACCACCACCAACTCCCTCGGCCCCGCCATGCCCCGGGAT
TAACATGGGCCCCGGGAGCTGGCAGACCCTGGCCCAATCCTAACAGTGCTAACTCAATTCCATATTCTCTCTCATC
ACCTGGTACCTATGTGGGACCCCCGGTGGTGGCGGCCCTCCAGGAACACCCATTATGCCCAGTCCCGCAGATTCA
ACAAATTCCAGTGACAACATCTACACAATGACCTGGCGGCAGGTCCAACCTCCCGATGGGTCCCGGCTCGGACGG
TCCGATGGGCGGCATGGGTGGCATGGAGCCACACCACATGAATGGATCATTAGGGTCAGGCGACATAGACGGACT
TCCAAAAAATTCTCCTAACAACATAAGTGGCATTAGCAATCCTCCAGGCACCCCTCGAGATGACGGCGAGCTAGG
AGGGAGCTTCTCTCACTCCTTTTCAAGATGACAATTATTCTCCAAGCATGACGATGAGTGTGTGATCCCCCTTCT
CCGAGACGCTGAGAGAGCCGGCATTGCAGGCGGGAAGACGCCAGAAATTATGCAAGAAGTGAGGTGTTATTATCC
AGGAGCTGGTGGGGAGGGCATCTCCCTGCTCCCCCTAAACCCCTCCCACCCCATCCACGCCCCCTACCTTTCCCA
ATTTTAGTTTCATGCAATAAAAAGGCCAAACTTTTTATTCCATAAAAC

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FIGURE 2257

MFAKGRGSAVPSDGQAWEKLASVVEYLLHVRVQKSAETFLSEIRWEKNI TLGEPPGFLHSWWCVFGDLYCAAPQ
RRDTCEHSSEAKAFHDYSAAAAPSPVLGNIPPNDGMPGGPIPPGFFQPFMSPRYVGGPGPP I RMGNQPPGGVLGT
QPLL PNSMDPTRQQGHPNMGGSMQRMNPPRGMGPMGPGPQNYGSGMRPPPN SLGPPCPGLTWARELADPGP ILTV
LTQFHIPPHHLVPMWDPRWWRP SRNTHYAQSRRFNKFQ

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FIGURE 2258

GGCGGGTTCGCGCCCCGAAGGCTGAGAGCTGGCGCTGCTCGTGCCCTGTGTGCCAGACGGCGGAGCTCCGCGGCC
GGACCCCGCGCCCCGCTTTGCTGCCGACTGGAGTTTGGGGGAAGAACTCTCCTGCGCCCCAGAGGATTTCTTC
CTCGGCGAAGGGACAGCGAAAGATGAGGGTGGCAGGAAGAGAAGGGCGCTTCTGTCTGCCGGGGTTCGACGCGG
AGAGGGCAGTGCCATGTTCTCTCCATCCTAGTGCGCTGTGCCTGTGGCTGCACCTGGCGCTGGGCGTGC GCGG
CGCGCCCTGCGAGGCGGTGCGCATCCCTATGTGCCGGCACATGCCCTGGAACATCACGCGGATGCCCAACCACCT
GCACCACAGCACGCAGGAGAACGCCATCCTGGCCATCGAGCAGTACGAGGAGCTGGTGGACGTGAAC TGCAGCGC
CGTGCTGCGCTTCTTCTCTGTGCCATGTACGCGCCATTGTGCACCCTGGAGTTCCTGCACGACCCTATCAAGCC
GTGCAAGTCGGTGTGCCAACGCGCGCGCAGCAGCTGCGAGCCCCTCATGAAGATGTACAACCACAGCTGGCCCGA
AAGCCTGGCCTGCGACGAGCTGCCTGTCTATGACCGTGGCGTGTGCATCTCGCCTGAAGCCATCGTCACGGACCT
CCCGGAGGATGTTAAGTGGATAGACATCACACCAGACATGATGGTACAGGAAAGGCCTCTTGATGTTGACTGTAA
ACGCCTAAGCCCCGATCGGTGCAAGTGTA AAAAGGTGAAGCCAAC TTTGGCAACGTATCTCAGCAAAAAC TACAG
CTATGTTATTTCATGCCAAAATAAAAGCTGTG CAGAGGAGTGGCTGCAATGAGGTCACAACGGTGGTGGATGTAAA
AGAGATCTTCAAGTCTCATCACCCATCCCTCGA ACTCAAGTCCCGCTCATTACAAATTCTTCTTGCCAGTGTCC
ACACATCTGCCCATCAAGATGTTCTCATCATGIGTTACGAGTGGCGCTCAAGGATGATGCTTCTTGAAAATTG
CTTAGTTGAAAAATGGAGAGATCAGCTTAGTAAAAGATCCATACAGTGGGAAGAGAGGCTGCAGGAACAGCGGAG
AACAGTT CAGGACAAGAAGAAAACAGCCGGGCGCACCAGTCGTAGTAATCCCCCAAACCAAGGGAAGCCCTCC
TGCTCCCAAACCAGCCAGTCCCAAGAAGAACATTA AAACTAGGAGTGCCCAAGAGAACAACCCGAAAAGAGT
GTGAGCTAACTAGTTTCCAAAGCGGAGACTTCCGACTTCCTTACAGGATGAGGCTGGGCATTGCCTGGGACAGCC
TATGTAAGGCCATGTGCCCTTGCCCTAACAACTCACTGCAGTGTCTTTCATAGACACATCTTG CAGCATTTTTTC
TTAAGGCTATGCTTCAGTTTTTCTTTGTAAGCCATCACAAGCCATAGTGGTAGGTTTGCCCTTTGGTACAGAAGG
TGAGTTAAAGCTGGTGGAAAAGGCTTATTGCATTGCATT CAGAGTAACCTGTGTGCATACTCTAGAAGAGTAGGG
AAAATAATGCTTGTTACAATTCGACCTAATATGTGCATTGTAAAATAAATGCCATATTTCAAACAAAACACGTAA
TTTTTTTACAGTATGTTTTATTACCTTTTGATATCTGTTGTTGCAATGTTAGTGATGTTTTTAAATGTGATCGAA
AATATAATGCTTCTAAGAAGGAACAGTAGTGGAATGAATGTCTAAAAGATCTTTATGTGTTTTATGGTCTGCAGAA
GGATTTTTGTGATGAAAGGGGATTTTTTGAAAAATCTAGAGAAGTAGCATATGGAAAAC TATAATGTGTCTTTTT
TACAATGACTTCAGCTCTGTTTTTAGCTAGAACTCTAAAAACAAAAATAATAATAAAGAAAAATAAAATAAAAG
GAGAGGCAGACAATGTCTGGATTCCGTGTTTTTGGTTACCTGATTTTCATGATCATGATGCTTCTGTGCAACACCC
TCTTAAGCAGCACCAGAAACAGTGAGTTTGTCTGTACCATTAGGAGTTAGGTACTAATTAGTTGGCTAATGCTCA
AGTATTTTATACCCACAAGAGAGGTATGTCAC TCATCTTACTTCCCAGGACATCCACCCTGAGAATAATTTGACA
AGCTTAAAAATGGCCTTCATGTGAGTGCCAAATTTGTTTTCTTCATTTAAATATTTTCTTTGCCTAAATACATG
TGAGAGGAGTTAAATATAAATGTACAGAGAGGAAAGTTGAGGTTCCACCCTCTGAAATGAGAATTACTTGACAGTT
GGGATACTTTAATCAGAAAAAAGA ACTTATCTTG CAGCATTTTATCAACAAATTTCAATAATTGTGGACAATTGG
AGGCATTTATTTTAAAAACAATTTTATTGGCCTTTTGCTAACACAGTAAGCATGTATTCTCTATAAGGCATTCA
ATAAATGCACAACGCCCAAAGGAAATAAAATCCTATCTAATCCTACTCTCCACTACACAGAGGTAATCACTATTA
GTATTTTGGCATATTATTCTCCAGGTGTTTCTTATGCACTTATAAAATGATTTGAACAAATAAACTAGGAACCT
GCTATACATGTGTTTCATAACCTGCCTCCTTTTGCTTGCCCTTTATTGAGATAAGTTTTCTGTCAAGAAAGCAG
AAACCATCTCATTTCTAACAGCTGTGTTATATTCATAGTATGCATTACTCAACAACTGTTGTGCTATTGGATA
CTTAGGTGGTTTCTTCACTGACAATACTGAATAAACATCTCA

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FIGURE 2259A

GCGTGTGCTGGGGCGAGCGGGAGCGGGCGAGGATGGGCACAGGATAGAGGCAGAGCCACCCACGCCGCCGCGGCC
CCACGCTGGGGCGACAGAGCCTCCAGTTCCCTTCAATGGTGGCGGGTCGCCGAGCTCTGATCGCCGGGAACCTT
TGCCGCTGCTGTCTGCGACCCCAAGCAGGTATAGACACGTGTGGCGTTTACGCTGTAGGATCCTCATTCCAC
TGGCTTTGAACATTTTGGGGACTTACAATGCCGCCACCCGCGGACATCGTCAAGGTGGCCATAGAATGGCCGGGC
GCCTACCCCAAACATCATGGAATTTGATCAGAAAAACCACTGTCTGCAATAATAAAGGAAGTCTGTGATGGGTGG
TCTCTTGCCAACCATGAATATTTTGCCTCCAGCATGCCGATAGTTCAAACCTTCTATATCACAGAAAAGAACCGC
AATGAGATAAAAAATGGCACTATCCTTCGATTAAACCATCTCCAGCTCAGAACGCCAGCAGCTCCATGAACGA
ATCCAGTCCTCGAGTATGGATGCCAAGCTGGAAGCCCTGAAGGACTTGGCCAGCCTCTCCCGGGATGTACAGTTT
GCCCAGGAGTTTATAAACCTGGACGTTATCTCTCTCCTCACGCAGATGGTGGAGAGCGGCACTGAGCGATACCAG
AAATTGCAGAAGATCATGAAGCCTTGCTTTGGAGACATGCTGTCTTCACCCTGACGGCCTTCGTGCGAGCTGATG
GACCATGGCATAGTGTCTTGGGATACATTTTCGGTGGCGTTTCATTAAAGAAGATAGCAAGTTTTGTGAACAAGTCA
GCCATAGACATCTCGATCCTGCAGCGTCTTGGCCATTTTGGAGTCGATGGTGTCTCAATAGCCATGATCTCTAC
CAGAAAGTGGCGCAGGAGATCACCATCGGCCAGCTCATTCCACACCTGCAAGGGTCAGATCAAGAAATCCAAACC
TATACTATTGCAGTGATTAAATGCGCTTTTCTGAAAGGCTCCTGATGAGAGGAGGCAGGAGATGGCGAATATTTTG
GCTCAGAAGCAACTGCGTTCCATCATTTTAAACACATGTCTATCCGAGCCAGCGGGCCATCAACAATGAGATGGCG
CACCAGCTGTATGTTCTACAAGTGCTCACCTTTAACCTCCTGGAAGACAGGATGATGACCAAAATGGACCCCCAG
GACCAGGCTCAGAGGGACATCATATTTGAACTTCGAAGAATTGCTTTTTGATGCTGAGTCTGAACCTAACACAGC
AGTGGCAGCATGGAGAAACGCAAGTCCATGTACACGCGAGATTATAAGAAGCTTGGGTTTCATTAAATCATGTCAAC
CCTGCCATGGACTTCACGCAGACTCCACCTGGGATGTTGGCTCTGGACAACATGCTGTACTTTGCCAAGCACCAC
CAAGATGCCTACATCCGGATTGTGCTTGAGAACAGTAGTCGAGAAGACAAGCATGAATGTCCCTTTGGCCGCAGT
AGTATAGAGCTGACCAAGATGCTATGTGAGATCTTGAAAGTGGGCGAGTTGCCTAGTGAGACCTGCAACGACTTC
CACCCGATGTTCTTCAACCCACGACAGATCCTTTGAGGAGTTTTTCTGCATCTGTATCCAGCTCCTGAACAAGACA
TGGAAGGAAATGAGGGCAACTTCTGAAGACTTCAACAAGGTAATGCAGGTGGTGAAGGAGCAGGTTATGAGAGCA
CTTACAACCAAGCCTAGCTCCCTGGACCAGTTCAAGAGCAAACCTGCAGAACCTGAGCTACACTGAGATCCTGAAA
ATCCGCCAGTCCGAGAGGATGAACCAGGAAGATTTCCAGTCCCGCCCGATTTTGGAACTAAAGGAGAAGATTAG
CCAGAAATCTTAGAGCTGATCAAACAGCAACGCCTGAACCGCCTTGTGGAAGGGACCTGCTTTAGGAACTCAAT
GCCCCGCGGAGGCAAGACAAGTTTTGGTATTGTGGCTTTTCGCCAAATCACAAAGTCTGCATTACGGAGACTTA
GAAGAGAGTCTCAGGGAGAAGTGCCCCACGATTCTTGCAGGACAACTGCCGGTGGCAGATATCAAAGCCGTG
GTGACGGGAAAGGACTGCCCTCATATGAAAGAGAAAGGTGCCCTTAAACAAAACAAGGAGGTGCTTGAACCTCGCT
TTCTCCATCTTGTATGACTCAAACCTGCCAAGTGAACCTCATCGCTCCTGACAAGCATGAGTACTGTATCTGGACG
GATGGACTGAATGCGCTACTCGGGAAGGACATGATGAGCGACCTGACGCGGAATGACCTGGACACCTGCTCAGC
ATGGAATCAAGCTCCGCCTCCTGGACCTGGAAAACATCCAGATCCTGACGCACCTCCGCCGATTCCCAAGGAG
CCCAGCAACTATGACTTCGTCTATGACTGTAACCTGAAGTGGCCGGGCCCAGACATGCCCTTCCAAAAC TGGAAC
ACCTAGCTAACAGGAGAGAGGAATGAAAACACACCCACGCCTTGGAACCGTCCCTTTGGTAAAGGGAAGCTGTGGG
TCCACATTCCCTTCAGCATCACCTCTAGCCCTGGCAACTTTCAGCCCTAGCTGGCATCTTGCTCACCGCCCTGA
TTCTGTTTCTCGGCTCCACTGCTTCAGGTCACTTCCCATGGCTGCAGTCCACTGGTGGGACAAGAGCAAAGCCCA
CTGCCAGTAAGAAGGCCAAAGGGCCCTTCCATCTTAGCCCTCTGCAGGCATGCCCTTCCCTTGGGCAGGAA
AGCCAGCAGCCCCAGACTGCCCAAAAACCTTGCCACAGACCAAGGGCAGTGCCCCAAGGCCCTGTCTGGAGGA
AATGGCCTAGCTATTTGATGAGAAGACCAAACCCACATCCTCCTTTCCCTCTCTCTAGAAATCATCTCGCACCA
CCAGTTACACTTGAATTAAGATCTGCGCTCAAATCTCCTCCACCTCTCTCCCTGCTTTTGCTTGTCTGTCTCC
TCTTTGGTCCCAAGAGCAGCAGCCGAGCCTCCTCGTGATCCTCCCTAGCATAAATTTCCCAACAGTCCACAGG
TCCCATGCCCACTTTGCGTCTGCACGTGTGATCGTGACAAATCTTCCCTCCTCACCAGCTAGTCTGGGGTTTTCTC
TCCCTGCCCCAGGCCAGAACTGCCTTCTTCATTTCCACCCACGCTCCCAGCCTCTTAGCTGAAAGCACAAATGGT
GAAATCAGTAGTCTCGCTCCATCTCTAATAGACTAAACCTAAATGCCTCTAGGACGGACTGTTGCTATCCAAGCG
TTTGGTGTACCTTCTCCTGGGAGGTCTGCTGCAACTCAAGTTCCACAGGATGGTCAAGCTGTGACACATCCAA
GTTTACATCATTTGTAATTATTACTGGTATTTACAATTTGCAAGAGTTTTGGGTTAGTTTTTTTTTTTTTTTGGCT
TTGTTTTTGGACAAAAGAGTCTAACATTTTTTGCCAAACAGATATATATTTAATGAAAAGAAGAGATACATAAAT
GTGTGAATTTCCAGTTTTTTTTTTAATTATTTTAATCCCAACATCTCCTGAAAAATAACATTCCTTAAACATGC

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FIGURE 2259B

TGTGGAATAAAATGGATTGTGATGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2260

CATTTAAAGGTGTGCGGCGGGTCTCTGTTACATGGCTCAACTGGAAACCTGTTTCATGAACAAGCTTACTCAGG
AACCATCTGGTGGTATTCCAGCACATTGTTCTTCAGGGGGACGACTCTAAGTCGCTTTGTGGTGGCAGCAGCTTA
GAATCAGTATTTGTGGTTGGGAAAGATGGACTTACGGGAGCTTGGTAATGCAGGTGGTGAAGGAGCAGGTTATGA
GAGCACTTACAACCAAGCCTAGCTCCCTGGACCAGTTCAAGAGCAAACCTGCAGAACCTGAGCTACACTGAGATCC
TGAAAATCCGCCAGTCCGAGAGGATGAACCAGGAAGATTTCCAGTCCCGCCCGATTTTGGAACATAAAGGAGAAGA
TTCAGCCAGAAATCTTAGAGCTGATCAAACAGCAACGCCTGAACCGCCTTGTGGAAGGGACCTGCTTTAGGAAAC
TCAATGCCCCGGCGGAGGCAAGACAAGTTTTGGTATTGTGCGCTTTCGCCAAATCACAAAGTCCTGCATTACGGAG
ACTTAGAAGAGAGTCCCTCAGGGAGAAGTGCCCCACGATTCCCTTGCAAGGACAACTGCCGGTGGCAGATATCAAAG
CCGTGGTGCAGGGAAAGGACTGCCCTCATATGAAAGAGAAAGGTGCCCTTAAACAAAACAAGGAGGTGCTTGAAC
TCGCTTTCTCCATCTTGTATGACTCAAACCTGCCAACTGAACCTCATCGCTCCTGACAAGCATGAGTACTGTATCT
GGACGGATGGACTGAATGCGCTACTCGGGAAGGACATGATGAGCGACCTGACGCGGAATGACCTGGACACCCCTGC
TCAGCATGGAATCAAGCTCCGCCTCCTGGACCTGGAAAACATCCAGATCCCTGACGCACCTCCGCCGATTCCCA
AGGAGCCCAGCAACTATGACTTCGTCTATGACTGTAACTGAAGTGCGCCGGGCCAGACATGCCCTTCCAAAAC
GGAACACCTAGCTAACAGGAGAGAGGAATGAAAACACACCACGCCTTGGAACCGTCCTTTGGTAAAGGGAAGCT
GTGGGTCCACATTCCCTTCAGCATCACCTTAGCCCTGGCAACTTTCAGCCCTTAGCTGGCATCTTGCTCACCGC
CCTGATTCTGTTCCCTCGGCTCCACTGCTTCAGGTCACTTCCCATGGCTGCAGTCCACTGGTGGGACAAGAGCAAA
GCCCAC TGCCAGTAAGAAGGCCAAAGGGCCCTTCCATCCTAGCCCTCTGCAGGCATGCCCTTCCTTCCCTTGGGC
AGGAAAGCCAGCAGCCCCAGACTGCCCAAAAACCTTGCCACCAGACCAAGGGCAGTGCCCCAAGGCCCTGTCTG
GAGGAAATGGCCTAGCTATTTGATGAGAAGACCAAAACCCACATCCTCCTTTCCCTCTCTCTAGAATCATCTCG
CACCACCAGTTACACTTGAATTAAGATCTGCGCTCAAATCTCCTCCACCTCTCTCCCTGCTTTTGCCTTGCTCT
GTTCTCTTTGGTCCCAAGAGCAGCAGCCGCAGCCTCCTCGTGATCCTCCCTAGCATAAATTTCCCAAACAGTCC
ACAGGTCCCATGCCCACTTTGCGTCTGCACTGTGATCGTGACAAATCTTCCCTCCTCACCAGCTAGTCTGGGGTT
TCCTCTCCCTGCCCCAGGCCAGAACTGCCTTCTTCAATTTCCACCCACGCTCCAGCCTCTTAGCTGAAAGCACAA
ATGGTGAAATCAGTAGTCTCGCTCCATCTCTAATAGACTAAACCTAAATGCCTCTAGGACGGACTGTTGCTATCC
AAGCGTTTGGTGTTACCTTCTCCTGGGAGGTCTGCTGCAACTCAAGTTCCACAGGATGGTCAAGCTGTCAGACA
TCCAAGTTTACATCATTTGTAATTATTACTGGTATTTACAATTTGCAAGAGTTTGGGTTAGTTTTTTTTTTTTTT
TTGCTTTGTTTTTGGACAAAAGAGTCTAACATTTTTTGGCAAACAGATATATATTTAATGAAAAGAAGAGATACA
TAAATGTGTGAATTTCCAGTTTTTTTTTAATTATTTAATCCCAAACATCTTCTGAAAATAACATTCCCTTAAAC
CATGCTGTGGAATAAAATGGATTGTGATGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2261

MQVVKEQVMRALTTKPSSLDQFKSKLQNLSTEILKIRQSERMNQEDFQSRPILELKEKIQPEILELIKQQRNLNR
LVEGTCFRKLNARRRQDKFWYCRLSPNHKVLHYGDLEESPQGEVPHDSLQDKLPVADIKAVVTGKDCPHMKEKGA
LKQNKEVLELAFSILYDSNCQLNFIAPDKHEYCIWTDGLNALLGKDMMSDLTRNDLDTLLSMEIKLRLLDLENIQ
IPDAPPPIPKEPSNYDFVYDCN

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FIGURE 2262

GCACCCGGCAGCGGTCTCAGGCCAAGCCCCCTGCCAGCATGGCCAGCGAGTTCAAGAAGAAGCTCTTCTGGAGGG
CAGTGGTGGCCGAGTTCCCTGGCCACGACCCTCTTTGTCTTCATCAGCATCGGTTCTGCCCTGGGCTTCAAATACC
CGGTGGGGAACAACCAGACGGCGGTCCAGGACAACGTGAAGGTGTCGCTGGCCTTCGGGCTGAGCATCGCCACGC
TGGCGCAGAGTGTGGGCCACATCAGCGGCGCCACCTCAACCCGGCTGTCACACTGGGGCTGCTGCTCAGCTGCC
AGATCAGCATCTTCCGTGCCCTCATGTACATCATCGCCAGTGCGTGGGGGCCATCGTCGCCACCGCCATCCCTCT
CAGGCATCACCTCCTCCCTGACTGGGAACCTCGCTTGGCCGCAATGACCTGGCTGATGGTGTGAACCTCGGGCCAGG
GCCTGGGCATCGAGATCATCGGGACCCTCCAGCTGGTGCTATGCGTGCTGGCTACTACCGACCGGAGGCGCCGTG
ACCTTGGTGGCTCAGCCCCCTTGCCATCGGCCTCTCTGTAGCCCTTGGACACCTCCTGGCTATTGACTACACTG
GCTGTGGGATTAACCTGCTCGGTCCCTTTGGCTCCGCGGTGATCACACACAACCTCAGCAACCACTGGATTTTCT
GGGTGGGGCCATTATCGGGGGAGCCCTGGCTGTACTCATCTACGACTTCATCCTGGCCCCACGCAGCAGTGACC
TCACAGACCGCGTGAAGGTGTGGACCAGCGGCCAGGTGGAGGAGTATGACCTGGATGCCGACGACATCAACTCCA
GGGTGGAGATGAAGCCCAAATTAGAAGGGGTCTGGCCCGGGCATCCACGTAGGGGGCAGGGGCAGGGGCGGGCGGA
GGGAGGGGAGGGGTGAAATCCATACTGTAGACACTCTGACAAGCTGGCCAAAGTCACTTCCCCAAGATCTGCCAG
ACCTGCATGGTCAAGCCTCTTATGGGGGTGTTTCTATCTCTTTCTTTCTTTCTGTTTCCTGGCCTCAGAGCTT
CCTGGGGACCAAGATTTACCAATTCACCCACTCCCTTGAAGTTGTGGAGGAGGTGAAAGAAAGGGACCCACCTGC
TAGTCGCCCCCTCAGAGCATGATGGGAGGTGTGCCAGAAAGTCCCCCTCGCCCCAAAGTTGCTCACCAGCTCACC
TGCGCAAGTGCCTGGGATTCTACCGTAATTGCTTTGTGCCTTTGGGCAGGCCCTCCTTCTTTTCTTAACATGCAC
CTTGCTCCCAATGGTGCTTGGAGGGGGAAGAGATCCAGGAGGTGCAGTGGAGGGGGCAAGCTTTGCTCCTTCAG
TTCTGCTTGCTCCCAAGCCCCCTGACCCGCTCGGACTTACTGCCTGACCTTGGAATCGTCCCTATATCAGGGCCTG
AGTGACCTCCTTCTGCAAAGTGGCAGGGACCGGCAGAGCTCTACAGGCCTGCAGCCCCTAAGTGCAAACACAGCA
TGGGTCCAGAAGACGTGGTCTAGACCAGGGCTGCTCTTTCCACTTGCCCTGTGTTCTTTCCCCAGGGGCATGACT
GTCGCCACACGCCTCTGCATATATGTCTCTTTGGAGTTGGAATTTCAATTATATGTTAAGAAAATAAAGGAAAATG
ACTTGTAAGGTC

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FIGURE 2263

MASEFKKKLFWRAVVAEFLATTLFVFISIGSALGFKYPVGNNQTAVQDNVKVSLAFGLSIATLAQSVGHISGAHL
NPAVTLGLLLSCQISIFRALMYIIAQCVGAIVATAILSGITSSLTGNSLGRNDLADGVNSGQGLGIEIIGTLQLV
LCVLATTDRIIRRDLDGGSAPLAIGLSVALGHLLAIDYTGCGINPARSFGSAVITHNFSNHWIFWVGPFIGGALAVL
IYDFILAPRSSDLTDRVKVWTSQVEEYDLDDADDINSRVEMKPK

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FIGURE 2264A

TCAGTCCCCGTGCACAGACCTGCACAAATGGCTGAGCCTCATCATTCCTGACAGCGAGGAGATCTTGGATGTGCC
AGGCCTAGTGAAAGACCAACAATCTCACTGCAGGGCCCCGCCAGCCCCAGGGAAGGGGAGGAGTTCTTGCCGCGCC
GACGCCGCCGTGCCACGGCAACGCGGCCATACTGCGCCGGACAGACCCAGTTGCCTGGTGCTGCGGCCCGGCGT
GGGCCTCGTGGGCAGAGCCAGAGCCAGAGCCATGGACAGCCTCTTCGTGGAGGAGGTGGCCGCCCTCTTGGTGAG
GGAGTTCTCAGCAGAAAGGGCTTAAAGAAGACATGTGTGACCATGGACCAGGAACGCCACGCTCTGACCTCAG
CATAACAACAGAAATGATCTTCGAAAGGTTTTGCATCTTGAATTTCTCTATAAGGAGAACAAGGCAAAGGAAAA
TCCTCTAAAAACAAGCCTTGAACCTCATCACCAGATACTTTCTGGATCACTTTGGAAATACGGCTAACAAATTCAC
TCAAGATACCCCCAATCCCTGCACTCTCAGTTCCAAAGAAAAATAACAAAGTGCCATCAAGATGCTCAGAGACTAC
ACTGGTAAATATATATGACCTTTTCAGATGAAGATGCAGGATGGAGAACATCATTGTGAGAAACAAGCAAAGCCAG
ACATGACAATCTTGATGGAGATGTACTTGGTAATTTTGATCATCTAAAAGGCCCGCACAAAAGTAAGCCCAT
GCAGACGGTCCCGGGTGAAACTCCTGTGTTGACTTCTGCATGGGAGAAGATAGACAAGCTTCACTCGGAGCCTTC
CTTGGATGTGAAGAGGATGGGAGAGAATTCCAGGCCAAAGTCTGGTCTGATTGTGCGAGGCATGATGTCTGGGCC
CATCGCCAGCTCCCCACAGGTGAGGAAATCAGGGACAGAGAAGTTAAGCAGCTTGCCACAGGTGACACAGTTGGT
AGGTGGTGATGCAGACTGGAGCGACGGCTTCACCTGCTGCATGAACCTGCTCTCTGATTCTTTTCACAGACACTA
TCTGAGACGGTCTCACCCTCAAGCAGCTCCACCCAACCCCAAGAAGAGAGCCGGAAGGTCCCTGAGCTCTTTGT
CTGCACCCAACAGGACATTCTGGCTTCGAGCAACAGCTCCCCCTCCAGGACCTCCCTGGGTGAGCTTAGTGAAC
GACCGTAGAAAGGCAGAAAACCACTGCCAGCAGCCCTCCCCATCTGCCAGCAAACGGCTGCCCCCATGGGACAG
GGCCAGGCCGAGGGATCCCTCCGAGGACACCCAGCAGTGACGGCAGCACAGACACGGACAGGATGCCCTTGAA
GCTCTACTTGCTGGTGGTAATTCAGGATGACCCAGGAGAGGCTGGAAAGAGCGTTCAAACGGCAGGGCAGCCA
GCCCCACCTGTGAGGTATTACAGTAAAGATAAACTGCAAAGCCTGTCCCTGGATATCACCTTAGATGCATGGAA
TGCCCTGGGGGAAAGTTTGCTGGTATCCCTGGGGTCTCATTCTAAAGACTGAAGCAGCTCTCTTGTCTTCCC
CAGCGTGTCTTTCTACGGCTGCATTGGGTTTTGCTGCATTTGCAGACATTTTGGATAATGTACACTTATGGAA
AAATCAGTTGCTGCCGTCTGACAAGGTGGATGGTGAGCTGGGTGCCCTGCGGCTCGAGGATGTGGAGGATGAGTT
GATAAGGGAAGAGGTCATCCTGTGCCAGTCCCATCAGTGCTCAAGTTGCAGACAGCATCAAAACCAATTGACCT
CTCAGTAGCAAAGGCACTTCAGATGTGGCTGGTGACGAAGAGCTGGGGAATAAGACCCCTCTGCTTTGGAGATGT
TAAATTGAACATGGATTTAAGGAGCACTTGCTTCCCACTAGCCTTTGCCAATGTGTCCCAGGAGTCAGATCCTG
TGCTAAGCCCCGTGATGCCTACAGAGATGAGCTCCTCAAGAAGCCTCTGCACCACAGGGGTGGTCTTGCGGAGT
CCTGGCAGCTGTCCAAGGCTGTGTCTACAGAACTCCTGTTGAAGGAGATAGCAAAGCCGACTGTGCTCAGGG
ACTGCAGCCTTCAGATGCCCACCGGACCCGCTGCCTCGTCTTGCCCTCGCAGACATTGTGTGGCGGGCAGGGGG
CCGAGAGAGAGCCGTTGTTGCACTGGCTTCGAGAACACAGCAGTTCACTCCAACAGGGAAATACAAAGCAGATGG
AGTCTTAGAAACACTTACGCTTCACAGTTTGACCTGCTATGAGGACCTGGTGACTTTTCTTCAACAAAGCATTCA
TCAGAACTTTCCCAAAGACCCCTGAAGGCCCTGGGCACAGCCCTGGGAAATGATCAGGCCCTGGCAGCACCAGATGT
CCCTTGGGTAGGCAATGGGGCCTACCCTAGGAACAAAAGGAGGCAGTTTGAAGTGGGCCCCATAGGCTGCATCCT
GCTCACCCCTTCTGCCATCCTGTCCAGGTCTACAGAGCTGGGCCTCTGCTGTGGATTGCGGGGAGGACAGTGGGG
TGAGGACATCATGGACAGATGTAAACCTAGCCGAGTGCTGCCGACCACTGCCGCTGGCCACTTCATTGTGAGA
GGCCCCAAGAAGAGTCGAGAAACAGACCTTTGAGGGAGCTCTCACAAAGCCCCAAGGATGCTCAGGGTCTGGGGT
CAGGACAGCTCTGAACCAGACCTGGGCAGCACTGAGCATGGGCTGCTCTGGTGCCCTCAGTGAGCACAGACCTGG
CCAGGTCAATTGAGGCCCTGAGAAGGGTCCAGTGTGACCCCCAGGGCCGTGTGTGCCCCCAGGGTTGTGTGTACCC
CCCTGGGTGAGGGGCCCTCAATGGACCTCACAGGGGCAAAGAAGACCCCTGAGCACAGTTGCTTGTGATCAGTCT
CTCAGTCACCCAGGAATTTGTCAATCTGCTCCTGACTGGGAAAGCTGTGTCCAACGTTTTCAACGATGTGGTTGA
GCTGGATTCTGGGATGGGAACATCACACTTCTCAGAGGCATTGCTGCACGCAGTGATATTGGCTTCTTATCTCT
CTTTGAGCATATAACATGTGCCAGGTTGGCTGCTTCTGAAGACCCCGAGGTTCCCCATCTGGGTGGTTTGACAG
TGAGAGCCACTTCAGCATCCTCTTTAGCCTGCAGCCGGGGCTCCTGCGTGACTGGAGGACTGAGAGGCTCTTTGA
CTTGTACTACTACGATGGCCTGGCCAACCAGCAGGAGCAGATCCGGCTGACCATTGACACCACCCAAACCATCTC
TGAGGACACAGACAACGACCTTGTCCCACCCCTCGAGCTCTGCATCAGAACCAAGTCTGTGTTCCATGTCTGCGA
GAACCTTGTGTGACACCAGCTGCCTGCCTGTTCCACTTCCCCCATCAATCCCCCATCATGGTGGGTCCACCTTGGC
AGTTGTTCTAGAAAAGCTGAGTGGGCTCTATCAGGCACCTTTTTCCCCATGAAAAACACTGGGTCCATCAACGT

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FIGURE 2264B

TGAAAAGCAGTTAAGGCAGTATCAGCAATGGGCACTCACTGCCGAGGAGAAGTCTGACTTCACCAAGCCAAGCCA
GTTTGTCTCCAAATACGGCACCAGTGTCTCTTATTTGAGCAGTGAAGATGAACGCTCTGATATGGATAAATTCCA
TCAAAGTGGCTCAACCCCAAAACCCAATAGACTCCTCTGGATCTGCTTGACACACAGAAGCCCAGTAAATAGTCT
GAAGCACTTGGATAGCATAGAAGCACTTAATTCTTCACATCCAATGGATTTCAAAAAGAAGATGAGAACATGCA
GAAGTGCGGTGGCCTGCTGATGAAGAAGGGGACCCCAGCAGCCTCTTCCCAAAGTGGCCCTGGCTGCCTGCAGCC
TTCCCTGGTGTCTTTGATTACCTGGGTCTTGGCCTCTGGCTCCCCATGTCCATCTGTCAAATCCTACCCATC
CCACAAGGCCAGCTCCAAGGCCCTCCTCTAAGAAGCCCTCCTGGATTACCCAGCCGACAGTTCAAGTCCTCCCC
TCTGAGTGCTCACAGGACTCAATCACCTCCTCTTTCACAAGCCTAG

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FIGURE 2265

GTCAC TCGTATAAAAACCTATGCTTTGAAGGTTCTCGTGTGTCTCGGCCTGCAGGTCTCGCTCAGAGCTGTGTCC
CTGAACATCCACCCTGCTGGGGTGGCTTGACGCACCTTCTGTGCAAATCTGTTGCTCGCAACCCTACCTACCTCT
CTCCCGAACCGGAGAAAACTTCGGCGGGGTCTTCCGGGTTTTGTGTGCAATCTGCGGCGGCGACCCGGCGCCG
CGTCACGCGGTGGTGAATGTGCGGCAGTACGCGCGCCGCGTCTGTTACGCGGCGATTTCATCATGCTCCGAGCCG
GCGGCGCGCGCCGCTTCCGTGCGCCACCCTCTCTGGACAGCCCAGGGCCGAGGCTCATGCCCTCTCCGCGTCCAG
TGCTGCTTAGAGGTGCTCGCGCCGCTCTGCTGCTGCTGCTGCGGCCCGGCTCTTAGCCCGACCCCTCGTCTCTCC
TCCGCGGGTCCCTCAGCGCGGCTCTCTGCGCCCGATCTCCTTGCCCGCCGCGCTCCCGGAGCAGCATGGACG
GCGCGGGGGCTGAGGAGGTGCTGGCACCTCTGAGGCTAGCAGTGCGCCAGCAGGGAGATCTTGTGCGAAAACTCA
AAGAAGATAAAGCACCCCAAGTAGACGTAGACAAAGCAGTGGCTGAGCTCAAAGCCCGCAAGAGGGTTCTGGAAG
CAAAGGAGCTGGCGTTACAGCCCAAGATGATATTGTAGACCGAGCAAAAATGGAAGATACCCCTGAAGAGGAGGT
TTTTCTATGATCAAGCTTTTGCTATTTATGGAGGTGTTAGTGGTCTGTATGACTTTGGGCCAGTTGGCTGTGCTT
TGAAGAACAATATTATTCAGACCTGGAGGCAGCACTTTATCCAAGAGGAACAGATCCTGGAGATCGATTGCACCA
TGCTCACCCCTGAGCCAGTTTTAAAGACCTCTGGCCATGTAGACAAATTTGCTGACTTCATGGTGAAAGACGTAA
AAAATGGAGAATGTTTTGCTGCTGACCATCTATTAAGGCTCATTACAGAAATTGATGTCTGATAAGAAGTGT
CTGTGCAAAAGAAATCAGAAATGGAAGTGTTTTGGCCAGCTTGATAACTATGGACAGCAAGAACTTGCGGATC
TTTTTGTGAATATAATGTAAATCTCCATTACTGGAAATGATCTATCCCTCCAGTGTCTTTAACTTAATGT
TCAAGACTTTCAATTGGGCCTGGAGGAAACATGCCTGGGTACTTGAGACCAGAACTGCACAGGGGATTTCTTGA
ATTTCAAACGACTTTTGGAGTTCAACCAAGGAAAGTTGCCTTTTGCTGCTGCCAGATTGGAATTTCTTTAGAA
ATGAGATCTCCCTCGATCTGGACTGATCAGAGTCAGAGAATTCACAATGGCAGAAATTGAGCACTTTGTAGATC
CCAGTGAGAAAGACCACCCCAAGTTCCAGAATGTGGCAGACCTTCACCTTTATTTGTATTACAGCAAAAGCCAGG
TCAGCGGACAGTCCGCTCGGAAAAATGCGCCTGGGAGATGCTGTTGAACAGGGTGTGATTAAATAACACAGTATTAG
GCTATTTCAATTGGCCGCATCTACCTCTACCTCACGAAGGTTGGAATATCTCCAGATAAACTCCGCTTCCGGCAGC
ACATGGAGAATGAGATGGCCATTATGCCTGTGACTGTTGGGATGCAGAATCCAAACATCCTACGGTTGGATTG
AGATTGTTGGATGTGCTGATCGTTCCTGTTATGACCTCTCCTGTCTATGCACGAGCCACCAAGTCCCCTTTGTAG
CTGAGAAACCTCTGAAAGAACCCAAAACAGTCAATGTTGTTTCAGTTTGAACCCAGTAAGGGAGCAATTGGTAAGG
CATATAAGAAGGATGCAAAACTGGTGATGGAGTATCTTGCCATTTGTGATGAGTGCTACATTACAGAAATGGAGA
TGCTGCTGAATGAGAAAGGGGAATTCACAATTGAACTGAAGGGAAAACATTTTCAGTTAACAAAAGACATGATCA
ATGTGAAGAGATTCCAGAAAACACTATATGTGAAGAAGTTGTTCCGAATGTAATTGAACCTTCTTCCGCTGG
GTAGGATCATGTATACGGTATTTGAACATACATTCCATGTACGAGAAGGAGATGAACAGAGAACATTCTTCAGTT
TCCCTGCTGTAGTTGCTCCATTCAAATGTTCCGCTCTCCACTGAGCCAAAACCAGGAGTTTCATGCCATTTGTCA
AGGAATTATCGGAAGCCCTGACCAGGCATGGAGTATCTCACAAGTAGACGATTCTCTGGGTCAATCGGAAGGC
GCTATGCCAGGACTGATGAGATTGGCGTGGCTTTTGGTGTCACCATTTGACACAGTGAACAAGACCCCCC
ACACTGCAACTCTGAGGGACCGTGACTCAATGCGGCAGATAAGAGCAGAGATCTCTGAGCTGCCAGCATAGTCC
AAGACCTAGCCAATGGCAACATCACATGGGCTGATGTGGAGGCCAGGTATCCTCTGTTTGAAGGGCAAGAGACTG
GTAAAAAGAGACAATCGAGGAATGAGGACAATTTTGACAACCTTTTGACCACTTTGCGCTAATAAAAAAAAAAAAA
CTACTCTTATGTCCACTTTACAAAAGAAAACAGCATTGTGATTACTCCAGGGACCGTATTTTATCTTCAGTGGC
TGCTGATTTTACCCCAACAATTAAAGTTGAAGGAATCCTGA

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FIGURE 2266

MDGAGAEVLA PLRLAVRQQGDLVRKLKEDKAPQVDVDKAVAE LKARKRVLEAKELALQPKDDIVDRAKMEDTLK
RRFFYDQAF AIYGGVSGLYDFGPVGCALKNNIIQTWRQHFIQEEQILEIDCTMLTPEPVLKTS GHVDKFADFMVK
DVKNGE CFRADHLLKAHLQKLMSDKKCSVEKKSEMESVLAQLDNYGQQLADLFVNYNVKSPITGNDLSPPVSFN
LMFKTF IGPGGNMPGYLRPETAQGIFLNFKRLLEFNQGKLPFAAAQIGNSFRNEISPRSGLIRVREFTMAEIEHF
VDPSEKDHPKFQNVADLHLYLSAKAQVSGQSARKMRLGDAVEQGVINNTVLGYFIGRIYLYLTKVGISPDKLRF
RQH MENEMAHYACDCWDAESKTSYGWIEIVGCADRSCYDLSCHARATKVPLVAEKPLKEPKTVNVVQFEP SKGAI
GKAYKKDAKLVMEYLAICDECYIITEMEMLLNEKGEFTIETEGKTFQLTKDMINVKRFQKTLYVEEVV PNVIEPSF
GLGRIMYTVFEHTFHVREGDEQRTFFSFP AVVAPFKCSVLPLSQNQEFMPFVKELSEALTRHGVSHKVDDSSGSI
GRRYARTDEIGVAFGVTIDFDTVNKTPHTATLRDRDSMRQIRAEISELPSIVQDLANGNITWADVEARYPLFEGQ
ETGKKETIEE

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FIGURE 2267

ATGACAGATGCCGCTGTGTCCTTCGCCAAGGACTTCCTGGCAGGTGGAGTGGCCGAAGCCATCTCCAAGACAGCG
GTAGCGCCCATCGAGCAGGTCAAGCTGCTGCTGCAGGCTTTTAACTTCGCCTTCAAAGATAAATACAAGCAGATC
TTCCTGGGTGGGAATCTGGCATCAGGAGGTGCCGCTGGGGCCACATACTTGTTGTTTGTGTACCTCTTGATTTT
GCCCGTACCTGTCTAGCAGCTAATGTGGGTAAAGCTGAAGCTGAAAGGAATTCCGAGGCCTCTGTGACTGCCTG
GTTAAGATCTACAAATCTGATGGGATTAAGGGCCTGTACCAAGGCTTTAACGTGTCTATGCAGGGTATTATCCGA
GCTGCCTACTTCGGTATCTATGACACCGCAAAGGGAATGCTTCCGGATCCCAAGGACACTCACATCGTCATCAGC
TGGATGACCACACAGACTGTCACTGCCTTTTCTGGGTTGACTTCCTATTCATTTGACATCTCAGGGCGCAAAGTA
ACTGACATCATGTACACAGGCACACTTGACTGCTGGAGGAAGATTGCTGGTGATGAAGGAGGCAAAGCTTTTTTC
AAGGGTTCATGGTCCAGTGTCTCAGAGGCATGGGTGGTGCTTTTGTGCTTGCTTGTTTGATGAAATCAAGAAG
TACAGGTAA

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FIGURE 2268

MTDAAVSFAKDFLAGGVAEAISKTAVAPIEQVKLLQLQAFNFAFKDKYKQIFLGGNLASGGAAGATYLCFVYPLDF
ARTCLAANVGKAEAREFRGLCDCLVKIYKSDGIKGLYQGFNVSMQGIIRAAYFGIYDTAKGMLPDPKDTHIVIS
WMTTQTVTAFSGLTSYSFDISGRKVTDIMYTGTLDCWRKIAGDEGGKAFFKGSWSSVLRGMGGAFLVLFLFDEIKK
YR

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FIGURE 2269

TCGGCGGGACGGCTCCCGGCTGCAGTCTGCCCCGCCGCCCGCGCGGGGGCCGAGTCGCGAAGCGCGCCTGCGAC
CCGGCGTCCGGGCGCGCTGGAGAGGACGCGAGGAGCCATGAGGCGCCAGCCTGCGAAGGTGGCGGCGCTGCTGCT
CGGGCTGCTCTTGGAGTGCACAGAAGCCAAAAAGCATTGCTGGTATTTTGAAGGACTCTATCCAACCTATTATAT
ATGCCGCTCCTACGAGGACTGCTGTGGCTCCAGGTGCTGTGTGCGGGCCCTCTCCATACAGAGGCTGTGGTACTT
CTGGTTCTTTCTGATGATGGGCGTGCTTTTCTGCTGCGGAGCCGGCTTCTTCATCCGGAGGCGCATGTACCCCC
GCCGCTGATCGAGGAGCCAGCCTTCAATGTGTCTACACCAGGCAGCCCCCAAATCCCGGGCCAGGAGCCCAGCA
GCCGGGGCCGCCCTATTACACCGACCCAGGAGGACCGGGGATGAACCCTGTGCGGAATTCCATGGCAATGGCTTT
CCAGGTCCCACCCAACCTACCCCAGGGGAGTGTGGCCTGCCCGCCCCCTCCAGCCTACTGCAACACGCCCTCCGCC
CCCGTACGAACAGGTAGTGAAGGCCAAGTAGTGGGGTGCCACGTGCAAGAGGAGAGACAGGAGAGGGCCCTTTCC
CTGGCCTTTTCTGTCTTCGTTGATGTTCACTTCCAGGAACGGTCTCGTGGGCTGCTAAGGGCAGTTCTCTGATAT
CCTCACAGCAAGCACAGCTCTCTTTAGGCTTTCCATGGAGTACAATATATGAACCTACACTTTGTCTCTCTGT
TGCTTCTGTTTCTGACGCAGTCTGTGCTCTCACATGGTAGTGTGGTGACAGTCCCCGAGGGCTGACGTCTTACG
GTGGCGTGACCAGATCTACAGGAGAGAGACTGAGAGGAAGAAGGCAGTGTGAGGAGTGCAGGTGGCATGTAGAGG
GGCCAGGCCGAGCATCCCAGGCAAGCATCCTTCTGCCCGGGTATTAATAGGAAGCCCCATGCCGGGCGGCTCAGC
CGATGAAGCAGCAGCCGACTGAGCTGAGCCCAGCAGGTCTCTGCTCCAGCCTGTCTCTCGTCAGCCTTCTCT
TCCAGAAGCTGTTGGAGAGACATTCAGGAGAGAGCAAGCCCCCTTGTCATGTTTCTGTCTCTGTTTCATATCCTAAA
GATAGACTTCTCCTGCACCGCCAGGGAAGGGTAGCACGTGCAGCTCTCACCGCAGGATGGGGCCTAGAATCAGGC
TTGCCTTGGAGGCCTGACAGTGATCTGACATCCACTAAGCAAATTTATTTAAATTCATGGGAATCACTTCTCTGC
CCCAAACCTGAGACATTGCATTTTGTGAGCTCTTGGTCTGATTTGGAGAAAGGACTGTTACCCATTTTTTGGTGT
GTTTATGGAAGTGCATGTAGAGCGTCTGCCCTTTGAAATCAGACTGGGTGTGTGTCTTCCCTGGACATCACTGC
CTCTCCAGGGCATTCTCAGGCCCCGGGGTCTCCTTCCCTCAGGCAGCTCCAGTGGTGGGTTCTGAAGGGTGCTTT
CAAAACGGGGCACATCTGGCTGGGAAGTCACATGGACTCTTCCAGGGAGAGAGACCAGCTGAGGCGTCTCTCTCT
GAGGTTGIGTTGGGTCTAAGCGGGTGTGTGCTGGGCTCCAAGGAGGAGGAGCTTGCTGGGAAAAGACAGGAGAAG
TACTGACTCAACTGCACTGACCATGTTGTCATAATTAGAATAAAGAAGAAGTGGTCGGAATGCACATTCCTGGA
TAGGAATCACAGCTCACCCCAGGATCTCACAGGTAGTCTCCTGAGTAGTTGACGGCTAGCGGGGAGCTAGTTCCG
CCGCATAGTTATAGTGTGATGTGTGAACGCTGACCTGTCTGTGTGCTAAGAGCTATGCAGCTTAGCTGAGGCG
CCTAGATTACTAGATGTGCTGTATCACGGGGAATGAGGTGGGGTGCTTATTTTTTAATGAACATAATCAGAGCCT
CTTGAGAAATTGTTACTCATTGAACCTGGAGCATCAAGACATCTCATGGAAGTGGATACGGAGTGATTTGGTGTCC
ATGCTTTTCACTCTGAGGACATTTAATCGGAGAACCTCCTGGGGAATTTTGTGGGAGACACTTGGGAACAAAACA
GACACCCTGGGAATGCAGTTGCAAGCACAGATGCTGCCACCAGTGTCTCTGACCACCCTGGTGTGACTGCTGACT
GCCAGCGTGGTACCTCCCATGCTGCAGGCCTCCATCTAAATGAGACAACAAAGCACAATGTTCACTGTTTACAAC
CAAGACAACCTGCGTGGGTCCAAACACTCCTCTCCTCCAGGTCATTTGTTTTGCATTTTTAATGTCTTTATTTTT
TGTAATGAAAAAGCACACTAAGCTGCCCCTGGAATCGGGTGACGTGAATAGGCACCCAAAAGTCCGTGACTAAA
TTTCGTTTGTCTTTTGATAGCAAATTATGTTAAGAGACAGTGATGGCTAGGGCTCAACAATTTTGTATTCCCAT
GTTTGTGTGAGACAGAGTTTGTTTTCCCTGAACTTGTTAGAAATTGTGCTACTGTGAACGCTGATCCTGCATAT
GGAAGTCCCACTTCGGTGACATTTCTGGCCATTCTGTGTTCCATTGTGTGGATGGTGGGTGTGCCCCACTTCTCT
GGAGTGAGACAGCTCCTGGTGTGTAGAATTCGCGGAGCGTCCGTGGTTCAGAGTAACTTGAAGCAGATCTGTGC
ATGCTTTTCTCTGCAACAATTGGCTCGTTCTCTTTTTTGTCTCTTTTGATAGGATCCTGTTTCTATGTGTG
CAAAATAAAAAATAAATTGGGCA

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FIGURE 2270

MRRQPAKVAALLLGLLLECTEAKKHCWYFEGLYPTYIICRSYEDCCGSRCVRLSIQRLWYFWFLMMGVLFCC
GAGFFIRRRMYPPPLIEEPAFNVSYTRQPPNPGPGAQQPGPPYYTDPGGPGMNPVGNSMAMAFQVPPNSPQGSVA
CPPPPAYCNTPPPPYEQVVKAK

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FIGURE 2271

GCCGCTCCTGGTGCTGCTTGTGTGCTCGTTTGGTGCGGACCTGGTACCTCTTTTGTGAAGTGGCAGCTGAGGAGA
CCGGCGCTCGCCATGGCCGACGAAAAGCCCAACCAAGGAGTCAAGTCGGAGACAACGATCATACTAATTTGAAG
GTGGCGGGGCAGGATGGTTCTGTGGTGCAGTTTAAAGATTAAGAGGCATACACCACTTAGTAACTAATGAAAGCC
TATTGTAAGCAACAGGGATTGTCAATGAGGCAGATCAGATTCCGATTGACGGGCAACCAATCAAGGAAACAGAC
ACACCTGCACAGTTGGAAATGGAGAATGAAGATACAATTGATGTGTTCCAACAGCAGACGGGAGGTGTCTACTTGA

AAAGGGAACCTGCTTCTTTACTCCAGAACTCTGTTCTTAAAGACCAAGATTACATTCTCAATTAGTCTTTCATT
TCCCCCTTCCCCATTCCTTTATTGTACATAACTGGTATATGTGCACAAGCATATTGCATTTTTTTT

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FIGURE 2272

MADEKPNQGVKSENNDHTNLKVAGQDGSVVQFKIKRHTPLSKLMKAYCKQQGLSMRQIRFRFDGQPIKETDTPAQ
LEMENEDTIDVFQQQTGGVY

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FIGURE 2273

GGAGGAAAATTCTTCCAGCGATGGTCTCCCACTCAGAGCTGAGGAAGCTTTTCTACTCAGCAGATGCTGTGTGTT
TTGATGTTGACAGCACGGTCATCAGAGAAGAAGGAATCGATGAGCTAGCCAAAATCTGTGGCGTTGAGGACGCGG
TGTCAGAAATGACACGGCGAGCCATGGGCGGGGCAGTGCCTTTCAAAGCTGCTCTCACAGAGCGCTTAGCCCTCA
TCCAGCCCTCCAGGGAGCAGGTGCAGAGACTCATAGCAGAGCAACCCCCACACCTGACCCCCGGCATAAGGGGAGC
TGGTAAGTCGCCTACAGGAGCGAAATGTTTCAGGTTTTTCCTAATATCTGGTGGCTTTAGGAGTATTGTAGAGCATG
TTGCTTCAAAGCTCAATATCCCAGCAACCAATGTATTTGCCAATAGGCTGAAATTCTACTTTAACGGTGAATATG
CAGGTTTTTGATGAGACGCAGCCAACAGCTGAATCTGGTGGAAAAGGAAAAGTGATTAACTTTTAAAGGAAAAAT
TTCATTTTAAGAAAATAATCATGATTGGAGATGGTGCCACAGATATGGAAGCCTGTCCTCCTGCTGATGCTTTCA
TTGGATTTGGAGGAAATGTGATCAGGCAACAAGTCAAGGATAACGCCAAATGGTATATCACTGATTTTGTAGAGC
TGCTGGGAGAACTGGAAGAATAACATCCATTGTCGTACAGCTCCAAACAACCTCAGATGAATTTTACAAGTTAT
ACAGATTGATACTGTTTGCTTACAGTTGCCTATTACAACCTTGCTATAGAAAGTTGGTACAAATGATCTGTACTTT
AAACTACAGTTAGGAATCCTAGAGATTGCTTTTTTTTTTTTTTTAACTGTAGTTCCAGTATTATATGATGACTA
TTGATTTCTTGAGAGAGTTTTTTTTTTTTTTTGGAGACAGAATCTTGCTCTGTTGCCCAGGCTGGAGTGCAGTGGCG
CGGTCTCGGCTCACTGCAAGCTCTGCCTCCCAGGTTACGCCATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGA
CTACAGGCACCCGCCACCACATCCGGCTAATTTTTTGTATTTTAGTAGAGACGGGGTTTGACCGTGTAGCCAG
GATGGTCTTGATCTCCTGACCTTGTGATCCGCCTGCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCTTGGGCCA
CCGCGCCCAGCCAATGTCCTAGAGAGTTTTGTGATCTGAATTCCTTATGTATATTGTAGCTATATTTCATACAA
AGTGCTTTAAGTGTGGAGAGTCAATTAAACACCTTTACTCTTAGAAATACGGATTCCGGCAGCCTTCAGTGAATAT
TGGTTTCTCTTTGGTATGTCAATAAAAGTTTATCCGTATGTGACAACGGATTGTGG

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FIGURE 2274

CGAGAAGACCCGGATAGTTCTCCCGGCCACGCCGCGCCGGCTCTGGGCACTCAGCATCGTTTTCTTTCTCCG
CTGGAGCAGCTATGGCGGCGGTGAAGACCCTGAACCCCAAGGCCGAGGTGGCCCGAGCGCAGGCGGCGCTGGCGG
TCAACATCAGCGCAGCGCGGGGTCTGCAGGACGTGCTAAGGACCAACCTGGGGCCCAAGGGCACCATGAAGATGC
TCGTTTCTGGCGCTGGAGACATCAAACCTTACTAAAGACGGCAATGTGCTGCTTCACGAAATGCAAATTC AACACC
CAACAGCTTCCTTAATAGCAAAGGTAGCAACAGCCCAGGATGATATAACTGGTGATGGTACGACTTCTAATGTCC
TAATCATTGGAGAGCTGCTGAAACAGGCGGATCTCTACATTTCTGAAGGCCTTCATCCTAGAATAATCACTGAAG
GATTTGAAGCTGCAAAGGAAAAGGCCCTTCAGTTTTTGGAGAAGTCAAAGTAAGCAGAGAGATGGACAGGGAAA
CACTTATAGATGTGGCCAGAACATCTCTTCGTACTAAAGTTTCATGCTGAACTTGCAGATGTCTTAACAGAGGCTG
TAGTGGACTCCATTTTGGCCATTAAAAAGCAAGATGAACCTATTGATCTCTTCATGATTGAGATCATGGAGATGA
AACATAAACTGAAACTGATACAAGCTTAATCAGAGGGCTTGTTTTGGACCACGGAGCACGGCATCCTGATATGA
AGAAAAGGGTGGAGGATGCATACATCCTCACTTGTAACGTGTCATTAGAGTATGAGAAAACAGAAGTGAATTC TG
GCTTTTTTACAAGAGTGCAGAAGAGAGAGAAAACTCGTGAAAGCTGAAAGAAAATTCATTGAAGATAGGGTTA
AAAAAATAATAGAACTGAAAAGGAAAGTCTGTGGCGATT CAGATAAAGGATTTGTTGTTATTAATCAAAAGGGAA
TTGACCCCTTTTCTTAGATGCTCTTTCAAAAAGAAGGCATAGTCGCTCTGCGCAGAGCTAAAAGGAGAAATATGG
AGAGGCTGACTCTTGCTTGTTGGTGGGGTAGCCCTGAATTCTTTTGACGACCTAAGTCCTGACTGCTTGGGACATG
CAGGACTTGATATGAGTATACATTGGGAGAAGAGAAGTTTACCTTTATTGAGAAATGTAACAACCCCTCGTTCTG
TCACATTATTGATCAAAGGACCAATAAGCACACACTCACTCAGATCAAAGATGCAGTGAGGGACGGCTTGAGGG
CTGTCAAAAATGCTATTGATGATGGCTGTGTGGTTCCAGGTGCTGGTGCCGTGGAAGTGGCAATGGCAGAAGCCC
TGATTAACATAAGCCCAGTGTAAGGGCAGGGCACAGCTTGGAGTCCAAGCATTTGCTGATGCATTGCTCATT A
TTCCCAAGGTTCTTGCTCAGAACTCTGGTTTTTGACCTTCAGGAAACATTAGTTAAAATTCAAGCAGAACATT CAG
AATCAGGTCAGCTTGTTGGGTGTGGACCTGAACACAGGTGAGCCAATGGTGGCAGCAGAAGTAGGCGTATGGGATA
ACTATTGTGTAAAGAAACAGCTTCTTCACTCCTGCACTGTGATTGCCACCAACATTCTCTTGGGTTGATGAGATCA
TGCGAGCTGGAATGTCTTCTCTGAAAGGTTGAATTGAAGCTTCTCTGTATCTGAATCTTGAAGACTGCAAAGTG
ATCCTGAGGATTACAGCTGTGGAATTTTGTCCAAGCTTCAAATAATTTTGAAAGAAATTTTCCCATATGAAAAA
AGGAGAGAACACTGGCATCTGTTGAAATTTGGAAGTTCTGAAATTATAGTATTTTAAAAAATTGCACTGAAGTGT
ATACACATAAAGCAGGTCTTTTATCCAGTGAACAGGATGTTTTGCTTTAGCAGCAGTGACATAAAAATTCCATGTT
AGATAAGCATATGTTACTTACCTTGTTATTAATATTTCTTGAAAAGCAGGCCACGAAGG

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FIGURE 2275

MAAVKTLNPKAEVARAQAALAVNISAAAGLQDVLRTNLGPKGTMKMLVSGAGDIKLTGDGNVLLHEMQIQHPTAS
LIAKVATAQDDITGDGTTSNVLIIGELLKQADLYISEGLHPRIITEGFEEAKEKALQFLEEVKVSREMDRETLID
VARTSLRTKVHAELADVLTEAVVDSILAIKKQDEPIDLFMIEIMEMKHKSETDTSLIRGLVLDHGARHPDMKKRV
EDAYILTCNVSLEYEKTEVNSGFFYKSAEEREKLVKAERKFIEDRVKKIIELKRKVCSDKGFVVINQKGIDPF
SLDALSKEGIVALRRARRRNMERLTLACGGVALNSFDDLSPDCLGHAGLVYEYTLGEEKFTFIEKCNNPRSVTLL
IKGPNKHTLTQIKDAVRDGLRAVKNAIDDGCVVPGAGAVEVAMAEALIKHKPSVKGRAQLGVQAFADALLIIPKV
LAQNSGFDLQETLVKIQAEHSESGQLVGVDLNTGEPMVAAEVGVWDNYCVKKQLLHSCVTIATNILLVDEIMRAG
MSSLKG

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FIGURE 2276

CAGACACACTGTGACGGCTGCCTGAAGCTAGTGAGTCGCGGCGCCGCGCACTGGTGGTTGGGTCACTGCCGCGCG
CCGATCGGTCGTTACCGCGAGGCGCTGGTGGCCTTCAGGCTGGACGGCGCGGGTCAGCCCTGGTTCGCCGGCTTC
TGGGTCTTTGAACAGCCGCGATGTCGATCTTCACCCCCACCAACCAGATCCGCCTAACCAATGTGGCCGTGGTAC
GGATGAAGCGTGCCGGAAGCGCTTCGAAATCGCCTGCTACAAAAACAAGGTCGTCGGCTGGCGGAGCGGCGTGG
AAAAAGACCTCGATGAAGTTCTGCAGACCCACTCAGTGTTTGTAAATGTTTCTAAAGGTCAGGTTGCCAAAAAGG
AAGATCTCATCAGTGCGTTTGGAACAGATGACCAAACTGAAATCTGTAAGCAGATTTTGACTAAAGGAGAAGTTC
AAGTATCAGATAAAGAAAGACACACAACTGGAGCAGATGTTTAGGGACATTGCAACTATTGTGGCAGACAAAT
GTGTGAATCCTGAAACAAAGAGACCATACACCGTGATCCTTATTGAGAGAGCCATGAAGGACATCCACTATTTCGG
TGAAAACCAACAAGAGTACAAAACAGCAGGCTTTGGAAGTGATAAAGCAGTTAAAAGAGAAAATGAAGATAGAAC
GTGCTCACATGAGGCTTCGGTTCATCCTTCCAGTCAATGAAGGCAAGAAGCTGAAAGAAAAGCTCAAGCCACTGA
TCAAGGTCATAGAAAGTGAAGATTATGGCCAACAGTTAGAAATCGTATGTCTGATTGACCCGGGCTGCTTCCGAG
AAATTGATGAGCTAATAAAAAAGGAACTAAAGGCAAAGGTTCTTTGGAAGTACTCAATCTGAAAGATGTAGAAG
AAGGAGATGAGAAATTTGAATGACACCCATCAATCTCTTCACCTCTAAACAC

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FIGURE 2277

MSIFTPTNQIRLTNVAVVRMKRAGKRFEIACYKNKVVGWRSGVEKDLDEVLQTHSVFVNVSKGQVAKKEDLISAF
GTDDQTEICKQILTKGEVQVSDKERHTQLEQMFRDIATIVADKCVNPETKRPHYTVILIERAMKDIHYSVKTNKST
KQQALEVIKQLKEKMKIERAHMRLRFILPVNEGKKLKEKLKPLIKVIESEDYGQQLEIVCLIDPGCFREIDELIK
KETKGKGSLEVLNLKDVEEGDEKFE

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FIGURE 2278

GACACTATCCGTGCGGCCAGGCGGAGACCCGGAGGACCGAAGCTTCCGGACGACGAGGAACCGCCCAACATGGCC
TCGGAGAGTGGGAAGCTTTGGGGTGGCCGGTTTGTGGGTGCAGTGGACCCCATCATGGAGAAGTTCAACGCGTCC
ATTGCCCTACGACCGGCACCTTTGGGAGGTGGATGTTCAAGGCAGCAAAGCCTACAGCAGGGGCCTGGAGAAGGCA
GGGCTCCTCACCAAGGCCGAGATGGACCAGATACTCCATGGCCTAGACAAGGTGGCTGAGGAGTGGGCCCAGGGC
ACCTTCAAACCTGAACCTCCAATGATGAGGACATCCACACAGCCAATGAGCGCCGCCTGAAGGAGCTCATTGGTGCA
ACGGCAGGGAAGCTGCACACGGGACGGAGCCGGAATGACCAGGTGGTCACAGACCTCAGGCTGTGGATGCGGCAG
ACCTGCTCCACGCTCTCCTGGGCCCTCCTCTGGGAGCTCATTAGGACCATGGTGGATCGGGCAGAGGCGGAACGTGAT
GTTCTCTTCCCAGGGGTACACCCATTTGCAGAGGGCCAGCCCATCCGCTGGAGCCACTGGATTCTGAGCCACGCC
GTGGCACTGACCCGAGACTCTGAGCGGCTGCTGGAGGTGCGGAAGCGGATCAATGTCTTCCCCCTGGGGAGGTGG
GGCCATTGCAGGCAATCCCCTGGGTGTGGACCGAGAGCTGCTCCGAGCAGAACTCAACTTTGGGGCCATCACTCT
CAACAGCATGGATGCCACTAGTGAGCGGGACTTTGTGGCCGAGTTCTTCTGGGCTTCGCTGTGCATGACCCA
TCTCAGCAGGATGGCCGAGGACCTCATCTCTACTGCACCAAGGAATTCAGCTTCGTGCAGCTCTCAGATGCCTA
CAGCACGGGAAGCAGCTGATGCCCCAGAGAAAAACCCGACAGTTTGGAGCTGATCCGGAGCAAGGCTGGGCG
TGTGTTTGGGCGGTGTGCCGGGCTCCTGATGACCCTCAAGGGACTTCCCAGCACCTACAACAAAGACTTACAGGA
GGACAAGGAAGCTGTGTTTGAAGTGTGAGACACTATGAGTGCCGTGCTCCAGGTGGCCACTGGCGTCTCTCTAC
GCTGCAGATTACCAAGAGAACATGGGACAGGCTCTCAGCCCCGACATGCTGGCCACTGACCTTGCCTATTACCT
GGTCCGCAAAGGGATGCCATTCCGCCAGGCCCACGAGGCCTCCGGGAAAGCTGTGTTTCATGGCCGAGACCAAGGG
GGTCGCCCTCAACCAGCTGTCACTGCAGGAGCTGCAGACCATCAGCCCCCTGTTCTCGGGCGACGTGATCTGCGT
GTGGGACTACGGGCACAGTGTGGAGCAGTATGGTGCCCTGGGCGGCACTGCGCGCTCCAGCGTTCGACTGGCAGAT
CCGCCAGGTGCGGGCGCTACTGCAGGCACAGCAGGCCTAGGTCTCCACACCTGCCCCCTAATAAAGTGGGCGC
GAG

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FIGURE 2279

MASESGKLWGGRFVGA VDPIMEKFNASIAYDRHLWEVDVQGSKAYS RGLEKAGLLTKAEMDQIILHGLDKVAEEWA
QGTFKLNSNDEDIHTANERRLKELIGATAGKLHTGRSRNDQVVDLRLWMRQTCSTLSGLLWELIRT MVDRAEAE
RDVLFPGYTHLQRAQPIRWSHWILRAIAGNPLGVDRELLRAELNFGAITLNSMDATSERDFVAEFLFWASLCMTH
LSRMAEDLILYCTKEFSFVQLSDAYSTGSSLMPQKKNPDSLELIRSKAGRVFGRCAGLLMTLKGLPSTYNKDLQE
DKEAVFEVSDTMSAVLQVATGVISTLQIHQENMGQALSPDMLATDLAYYLVRKGMPFRQAHEASGKAVFMAETKG
VALNQLSLQELQTI SPLFSGDVICVWDYGH SVEQYGALGGTARSSVDWQIRQVRALLQAQQA

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FIGURE 2280

CTCTTTCCCATCTTGCAAGATGGCAGGTGAAAAAGTTGAGAAGCCAGATACTAAAGAGAAGAAACCCGAAGCCAA
GAAGGCTGATGCTGGTGGCAAGGTGCAAGAGGGTAATCTTAAAGTTAAAAAGCCCAAGAAGGGGAAGCCCTATTG
CAGCCACAACCCTGTCCTTGTGAGAGGAAGTGGCAGGTATTCCCGATCTGCCATGTATTCTAGAAAGGCCATGTA
TAAGAGGAAGTACTCAGCCGCTAAATCAAAGATTGAAAAGAAAAAGGAGAAGGTTCTTGCAACTGTTACAAAACC
AGTTGGTGGTGACAAGAATGGTGGTACCCAGGTGGTTAAACTTCACAAAATGCCTAGATACTATCCTACCGAAGA
TGTACCTCGAAAGCTGTTGAGCCACAGCAAAAAACCCTTCAGTCAGCATGTGAGAAAAGTGAAGCCAGCATTAC
CCCTGGGACCATTCTGATCATCCTCACTGGATGCCACAGGGGCAAGAGGGTGGTTTTCTGAAGCAGCTGGCTAG
TGGCTTGTTACTTGTGACTGGACCTCTGGTCCTCAATTGAGTTTCTCTACGAGGAACACACCAGAAATTTGTCAT
TGCCACCTCAACCAAAATCGATATCAGCAATGTAAAAATCCCAAAACATCTTACTGATGCTTACTTCAAGAAGCA
GCAGCTGCGGAAGCCCAGACACCAGGAAGGCAACATCTTCGACACAGAAAAAGAGAAATATGAGATTACAGAGCA
GCGCAAGATTGATCAGAAAGCTGTGGACTCACAAATTTTACCAAAAGTCAAAGCTATTTCTCAGCTCCAGGGCTA
CCTGCGATCTGTGTTTGCCTGACGAATGGAATTTATCCTCACAAATTGGTGTCTAAATGTCTTAAGAACCTAA
TTAAATAGCTAAGTAC

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FIGURE 2281A

CGCTTCCTGCGCCTCTTCAGGTCACCGCTTGCTCTAGTTCCCAGGCTTTGGCCTCTAGTGGATGAGAATCACCGA
GTCTGCGGGGCTGGACGCTGACCGCCCGGGCCAGCACCTAGGCGGGCGGGAGCTGTGCGGGCCAGGGTTCGCGCG
GGCCGGGTAGAGGCTCGAGCCGGGACCCCGAGCGTGAACCCCGAGGCCAGCGGCGCTGGGGCCAGAGGGGGCCAG
GCGGGAGGTGGTGGCGGAGGCGAAGGGGCGACGGGACCTGGGCGCTGGCCCGTGTGTCTCGGCGGCGCTGGCGC
CGGCCGTGCTGTACGGTGAGCCCCAGGGAGGCGGATCTGGGCCCCGAGAAGGACACCCGCTGGATTGTCCCCG
TAGGCCCCGGCCCCGGCCCCCTCGGGAGCAGAACAGCCTTGGTGAGGTGGACGGGAGGGGACTTCGCGAGCAGACGC
GCGCGCCAGCGACAGCAGCCCGCCCCGGCCTCTCGGGAGCCGTGGGGCAGAGGCTGCAGAGCCCCAGGAGGGGGC
CAGTGTCTATTCAAAGATGTGGCTGTGGATTTACCCAGGAGGAGTGGTGGCAACTGGACCTGATGAGAAGATAA
CATACGGGGATGTGATGTTGGAGAACTACAGCCATCTAGTTTCCCTGGCTTATGAGGTGGCAACATCTTGTACTT
CGGAGATCTGAAGCCGAGCAACTTGCCCAAGTCCTTCTTCTTTTCCCATTAACAAGATATGATATCACCAAGCCA
AACGTCATCATTAAGTTGGAGCAGGGAGAGGAGCTGTGGATAACGGGAGGTGAATTTCCATGTCAACATAGTCCA
GCCCTTCACATCCTCAGCCGAAGATCTCACTTCTCTCCAGAGGCCTTTGCTGACTGACCCCTCAGGGATTGTGGG
ACTTTACCAAATCGGTTTGTAAATAACACCTAGAAGACGCTATCCGATCCATCAGGCCAGTATTCCTGTCTGGGG
GTACTTTCCACCGTGTGCTGGAATGGTTATCACAAGAAGGCTGTGCTGTCCCCCTCGCAACTCCAGGATGGTGTGT
AGCCAGTGACTGTGAGGATCGCCCCCTCTGACAGAAGATTTTCGCGTTCTGCGATACCAGAGCAGATAATCAGC
TCAACACTGTCTCTACCATCAAGTAACGCCCCAGACCCATGTGCAAAGGAGACAGTACTGAGTGCCCTCAAAGAG
AAGGAGAAGAAAAGGACAGTGGAGGAAGAAGACCAAATATTCCTTGATGGCCAGGAAAAATAAAGAAGGCGCCAT
GATAGCAGTGGCAGTGGACATTTCAGCATTGAGCCCCCTGGTGGCCAATGGAGTCCCCGCTTCTTTGTGCTAAG
CCTGGGTCTCTGAAGAGAGGCCTCAATTCTCAGAGCTCAGATGACCACTTGAATAAGAGATCCCGAAGCTCTTCC
ATGAGCTCCTTGACAGGCGCTTACGCAAGTGGCATCCCTAGCTCCAGCCGCAATGCCATTACCAAGTCTCTACAGC
TCCACTCGAGGCATCTCAGCTCTGGAAGAGAAATGGCCCCAGTTTCATCACCTTCTCTAGCCAGCCTCCTCC
CGTCCCAGACACCGGAGAGGCCAGCAAAGAAAATAAGAGAAGAGGAGCTGTGTCATCATTTCCAGTTCTTCACT
CCATTGGCAGCAGACAGGGAGTCCCAGGGAGAAAAGGCTGCAGATACAACCCCAAGGAAGAAACAAAACCTCGAAT
TCTCAGTCTACACCTGGCAGCTCTGGGCAGCGTAAGCGGAAAGTTTCAGCTGCTGCCTTCTCGGCGAGGGGAACAG
CTGACCTTGCCCTCCACCTCCCCAGCTTGGCTATTTCGATCACTGCCGAGGACCTAGACTTAGAGAAGAAGGCTTCA
TTACAGTGGTTCAACCAGGCCTTGGAGGACAAGAGCGATGCTGCCTCGAACTCTGTCACTGAGACCCCACTATC
ACTCAGCCTTCATTTACCTTTACCTTGCTGCTGCTGCACCTGCCTCCCCACCCACCTCCCTCGGCCCAAGC
ACCAACCCACTGTTAGAGAGCTTGAAGAAGATGCAGACTCCCCGAGCCTGCCACCCCTGCCAGAACTGTGCTGGA
GCAGCAACCACTGAGGCCCTCTCACCTCCAAGACCCAGCCTCCTACCCCGCTGGGTTTATCACAGTCAGGG
CCGCCAGGGCTGCTCCCCAGCCCCCTCCTTTGACTCCAACCCCGACCACCTTTGCTGGGGCTGATCCCTGCTCCA
TCCATGGTACCAGCCACTGACACCAAGGCACCTCCAACCTTCAGGCAGAGACGGCTACCAAACCCCAAGCCACA
TCTGCCCCGTCCCCCGCCCCCAAGCAAAGCTTCTGTTTGGAAACACAGAACACCTCACCTTCCAGCCCTGCCGCC
CCTGCTGCATCTTCAGCACCTCCCATTGTTCAAGCCCATTTTCAGGCTCCACCCAAGAGTGAGAAGGAAGGCCCC
ACACCGCTTGCCCTTCAGCTCACAGCCACAGCGCCCTCCAGCTCCTCCCTCCCCACGACCACCAGCACCACAGCC
CCGACCTTCCAGCCTGTCTTTAGCAGCATGGGGCCACCTGCATCTGTGCCCTTGCCCTGCTCCCTTCTTCAAGCAG
ACAATACTCCCGCCACTGCTCCCACCACAACCTGCCCGCTCTTCACTGGCCTGGCCAGCGCCACCTCTGCTGTG
GCTCCCATCACCTCTGCCAGTCCATCCACAGACTCTGCTTCAAGCCTGCGTTTGGCTTTGGCATAAACAGTGTG
AGCAGCAGCAGTGTGAGTACCAGACGACCGCCACTGCCGCTCACAGCCTTCTCTTCCGGGGCGCCCCAG
GCCTCTGCTGCCAGCTTACCCCGGCCATGGGCTCCATATTCCAGTTTGGCAAACCTCTGCTTGGCCACAACC
ACCACAGTCACCACCTTCAGCCAGTCCCTGCACACTGCCGTGCCAACGGCCACCAGCAGCAGCGTGCCGACTTT
AGTGGTTTTTGGCAGCACCTCGCCACCTCCGCCCGGCCACCAGCAGCCAGCCACTCTGACGTTTCAAGTACAG
AGCACCCCCACGTTCAACATTCCCTTTGGCTCAAGCGCCAAGTCCCCGCTCCCATCATATCCGGGAGCCAAACCC
CAGCCCGCATTTGGGGCGCTGAGGGGAGCCACCGGGGGCGCCAAGCGGGCCCTTGCCCCAGCTTTGGCAGC
TCTTTCACTTTTGGAACTCTGCAGCCCCGCTGCTGCACCCACACCTGCACCTCCGTCCATGATCAAGGTCGTG
CCTGCGTACGTGCTACGCCCATCCATCCTATCTTTGGCGGTGCCACGCACTCGGCGTTTGGGTGAAAGCCAGC
GCTTCGGCCTTGGCGCTCCCGCCAGCTCACAGCCCGCCTTTGGCGGCTCCACTGCTGTCTTCTTCGGTGCAGCC
ACCAGCTCCGGCTTTGGAGCCACCACCAGACCGCCAGCAGCGGGAGCAGCAGCTCGGTGTTTGGCAGCACAACA
CCATCACCTTCACGTTTGGGGTTTCGGCAGCCCCCGCTGGCAGTGGGAGCTTTGGGATCAATGTGGCCACCCCA

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FIGURE 2281B

GGCTCCAGCACCACCACCGGAGCTTTCAGCTTTGGAGCAGGACAGAGTGGGAGCACAGCCACCTCCACCCCCTTC
GCAGGGGGCTTAGGTCAGAACGCCCTGGGCACCACCGGCCAGAGCACACCGTTTGCCCTTCAACGTGAGCAGCACA
ACTGAGAGCAAACCTGTGTTTGGAGGCACCGCCACCCCCACCTTTGGTCTGAACACCCCTGCGCCTGGAGTGGGC
ACATCAGGCAGCAGCCTCTCCTTTGGGSCATCCTCAGCACCCGCCAAGGCTTTGTTGGTGTGTCACCTTTCGGC
AACACTTTTGTCTACCAGCAAGAACACAGCCCGAGGAAGGGACCCAATAACCTTTCAAAACGCAAACTGCTGCCT
GCGGTGAGGGGCCAGGGTCTTCCACGGAGAGGACAGGCATCTTCTTTCCCACCAGGAAGGAGTGAGCCCGGAGC
CTCTGCTATGTGCAAGGCGGTGTGCAAGCACCGGCTGCAGCTTTTGTCTCTTCTTCTTCTTGGGGCTGGGCT
GGGTGTGCGTTCTGGTGTGATGCTTTGGCCTGTGAGGCTGAGCTAGAGAAATGTAGATGTTAGATGTGCCAGTA
CCATCCTGCGCCTCCCAAGCATGCCCCACTCACTCACGTCGGCATCTCGACCCGTTCAATTACAGCAACGAAGA
AGCCACCGCTAAGCGTGGTCTTGGGGGAAGCCCGGAGGCAGTGCTCGGCACCCGGGAACGTGCTCAGGCCTCGGT
GGGGCCGGGCAGGCAGGGCGGGAGCTAGCCTGCAAGAGAAACAGCCCCAATGCTGGGTAAAGAGAGCAGTTCACCC
CATCCCCCCTCCACGACCCTGGCGCACGCCCTGTACCTGAAGGCGCCCGGTTCTGCTGCAGCGCATCTTGATC
CATGTCTTCATTCTCCTCCTGGCAGAGGGAGCACATGGAGTAGACGAGCCGCTGCAGGGAAGGGAAAAGTGAGCGC
GTGGCACAGGGCTCGCTGCTGGAACCTGCCAGGGCATGCAGACGCACCGGGCTAGGTGTCCCTGCCCGGGCTC
CTCCAGCTGTCTGCTCGGCATACCTAAGGAAAAGCGTGTCTCGGTTACACAGCTTCACAGGCTGCCTCAGTCTG
AAATCCTCGCTCCTGAAATCCTCGCTTACAGAGGAGAACTTTTGCTCCAGGGTCCCAAGCCCATTAAAGTGTC
GAACTAAGACCAAAACAGATGACTCCAGGTCTAAGCTGCTGTGGACCTCTGAGTCCCTCAGCCACGCCTTCTCAC
CATCTCACCCGAGCCACTGCAGGAAGGATCCAGCAGGACATAGTGGACCTCACGATAGCGCGGATCTAAGGGGGA
GACCGCCAGGAAGTCTCCTCAGCCAGCTCACAGCAGGAGACGCCAGCCAGGCCAGGCAGCGTGGCCATGGATGC
CAGCCGCTGGCATCCAGGTCAAAGGCAAAGATCTTCTAGGGCAGAGGGCAGAGCAGGGGTGAGCTGAGCATGC
ATGGAGCAGCTAAGGECCTGTACAGCTGACACAGACAACCAGAACATGCAGGTTAAGCCAGGACACACAATATT
GAAACAGCCTATATTTAAAGGGCCAGGGTCAGAGGTAAGTGGCCTGGGGTCTCTGCCCAAGGGCTAAGGGATC
CACATCTCACACCTGCAGTGGGGAAAGCTTAGCTTGGGGCAAATACCGTGAACACTTTGGTGCAGCAGGAAAGA
GTTAAGCGAAAGTCATCCTTTACGCCCTTATTACCCACTGAAAGGCACAAAATCAAACCCCATCTCCTCCTCCTC
CTCCTGTGGCACTCACCCCTTGGTTCTTCAGAAGAGCAGCCAAGTGACTGGTCTTTATTGCCCTGGGGTGGCACAGG
CATCCATGACATGGGAGCCTGGCGGGGGTCCAGCAGCATGGCTGGGAGACAGCTGGCCTGGCAGGACAGACAG
GGGCCGGGTAAACAGAGACCCCAGGCTAGGCCCTTCCCGTGCCTACACATTCTTCCCTTTTCTATTCTCTTGCC
TACCCTGTCTGCAAGATGAGGTGTCCGGCCCGGTACAGTGGGTGTTTATGCAGATCTGTCTGGCGGGGAAACAC
CAGCAGCTCCGGCATCAAGGGGTCCAGGAGAAAATGCTTCCCCTTGAGGGCTCGTAAGTCATCGAGGCTGCCAGG
GAAGAACCATTTCATTTCATTTTCTGAAATTTCTCCCTGCCAGGCCCTATTTCAACGGTCCATTTCATGCAACAA
TGTTACCACAGCTATGGAGAAATCAACAGGGTGATAAGGGAATCCGGGATCCGCAGTTGAGGGAATGGGTTGTCA
AGCCAGACTTATGGGTGAGGAGCCCCCTCTACTGTTTACCAGCAGTGGGAGCCTGGGCAAGTGATTCAATCTCAA
GCCCCACTGGCATCTCTGTAAATAGTAGGTGTGAGGATTCAATGAGCCAATATATCCAAGATACTTACGTGCCA
CAATTTAATAAATGTTAGCTATTCTGTGTAAGCATAACCTTGGAGAAAGGTTACTTTACAGGGGGGTGAGGAGT
GGGGAAGTGAGAGCTGAGCTCATTCTTGATGGATGAGGAGTTAGTCATGTGAGGCGCTTAGGTTAAACTACATT
CACTATAACTCAGTAAAGCAGTCCCGCCACTCTCCGACCCATGCAGAAATAGGCCTAGGGAGTCACATGTCTCA
GTTTCAAGAAATCTATCGAAGTGGCAGAGCTGGAATTCAAACACAAGCAGCCGTTCTCTGCTATTCCACCCTGGTGT
CCAAGCAACATGGTAGGGCAGGAAGGAAGAGGATCTTACAAAGAGTAAGGGAAAGGGAGAGGGGCAGAGGCTGCTT
CTCAGAGCCACCAAAGGACAAAATAAGACAGGTGTGAGCCAGTGGAGGAGGCACGGGGCAGAGACCAGCCACTG
TTGCTGGCAGCGTGGTGACGTAGCACTGTGGCAGATGGACCTGGAGAGGAAGCAGGAGGGACAGCACAAATGGAG
CCAAGAAAGGACTTAGCATGGCCGGGCGCGGTGGTTTCATGCCTGTAATCCAGCATTTTGGGAGGCCAAGGTGGG
CAGATCACCTGAGGTGAGGAGTTTGGAGACCAGCCTGGCCAACATGGAGAAATCCCGTCTCTACTAAAAATACAAA
ATTAGCCAGGCATGGTGTGCTGCAATCCTGTAGGGAAAAGAAAGAGAGATCAGACTGTTACTGTGTCTG
TGTAAGAAAGGGAAGACATAAGAAATTCATTTTACCTGTACCTTGAACAATTGGTTGGCTGAGATGCTGTTAAT
TTGTGACTTTGCCCAAAATTTGAGCTCACAAAACATGTGTTGTATGGAATCAAGGTTTAAAGGATCTAGGGCTG
TGCAGGACATGCCTTGTTAATAAAACGTTTACAAGC

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FIGURE 2282

GCCAGGGAGCACTGGAGGCCACCCAGTCATGGGGGACACCTTCATCCGTCACATCGCCCTGCTGGGCTTTGAGAA
GCGCTTCGTACCCAGCCAGCACTATGTACATGTTCCCTGGTGAAATGGCAGGACCTGTCGGAGAAGGTGGTCTACC
GGCGCTTCACCGAGATCTACGAGTTCCATAAAACCTTAAAAGAAATGTTCCCTATTGAGGCAGGGGCGATCAATC
CAGAGAACAGGATCATCCCCACCTCCCAGCTCCCAAGTGTTTTGACGGGCAGCGGGCCGCCGAGAACCACCAGG
GCACACTTACCGAGTACTGCGGCACGCTCATGAGCCTGCCCACCAAGATCTCCCGCTGTCCCCACCTCCTTGACT
TCTTCAAGGTGCGCCCTGATGACCTCAAGCTCCCCACGGACAACCAGACAAAAAGCCAGAGACATACTTGATGC
CCAAAGATGGCAAGAGTACCGCGACAGACATACCCGGCCCCATCATCCTGCAGACGTACCGCGCCATTGCCAACT
ACGAGAAGACCTCGGGCTCCGAGATGGCTCTGTCCACGGGGGACGTGGTGGAGGTCGTGGAGAAGAGCGAGAGCG
GTTGGTGGTTCTGTTCAGATGAAAGCAAAGCGAGGCTGGATCCCAGCATCCTTCCTCGAGCCCCCTGGACAGTCCTG
ACGAGACGGAAGACCCTGAGCCCAACTATGCAGGTGAGCCATACGTCGCCATCAAGGCCTACACTGCTGTGGAGG
GGGACGAGGTGTCCCTGCTCGAGGGTGAAGCTGTTGAGGTAATTCACAAGCTCCTGGACGGCTGGTGGGTCATCA
GGAAAGACGACGTACAGGCTACTTCCCGTCCATGTACCTGCAAAAGTCAGGGCAAGACGTGTCCCAGGCCCAAC
GCCAGATCAAGCGGGGGGCGCCGCCCGCAGGTGTCATCCGCAACGTGCACAGCATCCACCAGCGGTGCGGGA
AGCGCCTCAGCCAGGACGCCTATCGCCGCAACAGCGTCCGTTTTCTGCAGCAGCGACGCCGCCAGGCGCGGCCGG
GACCGCAGAGCCCCGGGAGCCCGCTCGAGGAGGAGCGGCAGACGCAGCGCTCTAAACCGCAGCCGGCGGTGCCCC
CGCGGCCGAGCGCCGACCTCATCCTGAACCGCTGCAGCGAGAGCACCAGCGGAAGCTGGCGTCTGCCGTCTTGAG
GCTGGAGCGCAGTCCCCAGCTAGCGTCTCGGCCCTTGCCGCCCGTGCCGTGTATATACGTGTTCTATAGAGCCTG
GCGTCTGGACGCCGAGGGCAGCCCCGACCCCTGTCCAGCGCGGCTCCCGCCACCCTCAATAAATGTTGCTTGAG
TGGACCGAGGCTCTGCAGGAATGCAGGGAGGGCCGGGCTCCGCCCCAGGGTTATTTCTAAGTTGA

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FIGURE 2283

MYMFLVKWQDLSEKVVYRRFTEIYEFHKTLEMFPIEAGAINPENRIIPHLPA PKWFDGQRAAENHQGTLTEYCG
TLMSLP TKISRCPHLLDFFKVRPDDLKLPTDNQTKKPETYLMPKDGKSTATDITGP IILQTYRAIANYEKTSGSE
MALSTGDVVEVVEKSESGWWFCQMKAKRGWIPASFLEPLDSPDETEDPEPNYAGEPYVAIKAYTAVEGDEVSLLE
GEAVEVIHKLLDGWWVIRKDDVTGYFPSMYLQKSGQDVSQAQRQIKRGAPPRRSSIRNVHSIHQSRKRRLSQDAY
RRNSVRFLQQRRRQARPGPQSPGSPLEERQTQRSKPQPAVPPRP SADLILNRCSESTKRKLASAV

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FIGURE 2284

CCCCGCGCTGCGCGGAGCAGGGACCAGGCGGTTGCGGCGGCGACAGCCATGCGCGGCGGCTGGCAGGTCTGGCC
GCGGGCTTGCAGGTCCCGCGGGTTCGCGCCAGCCCAGACTCGGACTCGGACACAGACTCGGAGGACCCGAGTCTC
CGGCGCAGCGCGGGCGGGCTTGCCTCCGCTCGCAGGTTCATCCACAGCGGTCACTTCATGGTGTCTCGCCGCACAGC
GACTCGCTGCCCCGGCGGCGCGACCAGGAGGGGTCCGTGGGGCCCTCCGACTTCGGGCGCGCAGTATCGACCCC
ACACTCACACGCCCTCTTCGAGTGTCTTGAGCCTGGCCTACAGTGGCAAGCTGGTGTCTCCCAAGTGAAGAATTC
AAAGGCCTCAAGCTGTCTTGACAGAGACAAGATCCGCTGAACAACGCCATCTGGAGGGCCTGGTATATCCAGTAT
GTGAAGCGGAGGAAGAGCCCCGTGTGTGGCTTCGTGACCCCCCTGCAGGGGCTGAGGCTGATGCGCACCCGAAG
CCGGAGGGCGTGGTCTGGAGGGGAACACTGGAAGCGGCGCATCGAGGTGGTGTGCGGGAATACCACAAGTGG
CGCATCTACTACAAGAAGCGGCTCCGTAAGCCCAGCAGGGAAGATGACCTCCTGGCCCCCTAAGCAGGCGGAAGGC
AGGTGGCCGCGCGCGGAGCAATGGTGCAAACAGCTCTTCTCCAGTGTGGTCCCCGTGTGTGGGGGACCCAGAG
GAGGAGCCGGGTGGGCGGCAGCTCCTGGACCTCAATTGCTTTTTGTCCGACATCTCAGACACTCTCTTACCATG
ACTCAGTCCGGCCCTTCGCCCCCTGCAGCTGCCGCTGAGGATGCCTACGTGCGCAATGCTGACATGATCCAGCCG
GACCTGACGCCACTGCAGCCAAGCCTGGATGACTTCATGGACATCTCAGATTTCTTTACCAACTCCCGCCTCCCA
CAGCCGCCCATGCTTCAAACCTTCCAGAGCCCCCAGCTTCAGCCCCGTGGTTGACTCCCTCTTCAGCAGTGGG
ACCTGGGGCCAGAGGTGCCCCCGGCTTCTCGGCCATGACCCACCTCTCTGGACACAGCCGTCTGCAGGCTCGG
AACAGCTGCCCTGGCCCCCTGGACTCCAGCGCCTTCTGAGTTCTGATTTCTCTCTTCTGAAGACCCCAAGCCC
CGGCTCCACCCCTCCTGTACCCCCACCTCTGTGCAATTACCTCCCCCTGCCAAGGTGCCAGGCCTGGAGCCC
TGCCCCCACCCTCCCTTCCCTCCCATGGCACCCACCTGCTTTGCTGCAGGAAGAGCCTCTCTTCTCTCCAGG
TTTCCCTTCCCCACCGTCCCTCCTGCCCCAGGAGTGTCTCCGCTGCCTGCTCCTGCAGCCTTCCACCCACCCCA
CAGTCTGTCCCCAGCCCAGCCCCCACCCTTCCCCATAGAGCTTCTACCTTGGGGTATTTCGGAGCCTGCCTTT
GGGCTTGTCTTCCATGCCCAGAGGCAAGCCCCCGCCCCATCCCCTAGGGGACAGAAAGCCAGCCCCCTACC
TTAGCCCCCTGCCACTGCCAGTCCCCCACCCTGCGGGGAGCAACAACCCCTGCCTCACACAGCTGCTCACAGCA
GCTAAGCCGGAGCAAGCCCTGGAGCCACCACTGTATCCAGCACCTCCTCCGGTCCCCAGGGTCCCCGCAGGAG
ACAGTCCCTGAATTCCCTGCACATTCCTTCCCCGACCCCGGCCCTACACCGCCCCGGCCACCTCCAGGCCCG
GCCACATTGGCCCCCTCCAGGCCCTGCTTGTCCCCAAAGCGGAGCGGCTCTCACCCCCAGCGCCAGCGGCAGT
GAACGGCGGCTGTGAGGGGACCTCAGTCCATGCCAGGCCCTGGGACTCTGAGCGTCCGTGTCTCTCCCCGCAA
CCCATCCTCAGCCGGGGCCGTCCAGACAGCAACAAGACCGAGAACCAGGCGTATCACACACATCTCCGCGGAGCAG
AAGCGGCGCTTCAACATCAAGCTGGGGTTTGACACCCCTTCATGGGCTCGTGAGCACACTCAGTGCCAGCCCAGC
CTCAAGGTGAGCAAAGCTACCACGCTGCAGAAGACAGCTGAGTACATCCTTATGCTACAGCAGGAGCGTGCGGGC
TTGCAGGAGGAGGCCAGCAGCTGCGGGATGAGATTGAGGAGCTCAATGCCGCCATTAACTGTGCCAGCAGCAG
CTGCCCCGCCACAGGGGTACCCATCACACACCAGCGTTTTGACCAGATGCGAGACATGTTTGATGACTACGTCCGA
ACCCGTACGCTGCACAACCTGGAAGTTCTGGGTGTTGAGCATCTCATCCGGCCTCTGTTTGATGCTTCAACGGG
ATGGTGTCCACGGCAAGTGTGCACACCTCCGCCAGACCTCACTGGCCTGGCTGGACAGTACTGCTCTCTGCC
GCTCTCCGGCCAACGTGCTTGAACCTCCCTACGCCAGCTGGGCACATCTACCAGTATCCTGACCGACCCGGGCGC
ATCCCTGAGCAAGCCACACGGGCAGTCACAGAGGGCACCTTGGCAAACCTTTATAGTCTGCGCCAGACCTGCT
GCTCACTCAGCTGCCCTGGGGGCTGCTTTCCCTGGGCACGGGCTCCAGGGATCATCTCTGGGCACCTCCCTTCCTG
CCCCAGGCCCTGGCTCTGCCCTTCCCTGGGGGGTGGAGCAGGGTCCAGGTTTACACTTGCCACCTCCTGGAGGT
CAAGAAGAGCAGAGTCCCGTCCCTGCTCTGCCACTGTGCTCCAGCACCGTGACCTTGGGTGACTCGTCCGCTGT
CTTTGGACCGCTGTGTTTCAATCTGCAAAATGGGGATGGGGAAGGTTCAATCAGCAGATGACCCCCAGGCCTTG
CAGCTGTGACATTGGGGGCTAGGCTGGCAACTCCGGGGGCTCAACGGTGGAAAGAGGAGGATGCTGTTTATCTG
TCACCTCCACTTGCTCCCCGACAGGTGGGGCACAGACCTCTGTTCTGAGCAGAGAAGCAGAAAAGAGGTTCCC
TCTCTGTCTCTTCACTGCTGACCCAGAGGGGCTGCAGGATGGTTTCCCTGGGAGAGGCCAGGAGGCGCTGAT
CCCAGGAGACACCAGGGCCAGAGTGACCACAGCAGGGCAGGCATCATGTGTGTGTGTGTGTGGATGTGTGTGT
GTGGGTTTTGTAAAGAATTCTTGACCAATAAAAGCAAAACTGTCTGCTGGTTAAAAAAAAAAAAA

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FIGURE 2285

MAGALAGLAAGLQVPRVAPSPDSDSDTSEDPSLRRSAGGLLRSQVIHSGHFMVSSPHSDSLPRRRDQEGSVGPS
DFGPRSIDPTLTRLFECLSLAYSGKLVSPKWKNFKGLKLLCRDKIRLNNAIWRAWYIQYVKRRKSPVCGFVTPLQ
GPEADAHRKPEAVVLEGNWKRRIEVMREYHKWRIYYKKRLRKPSREDDLLAPKQAEGRWPPPEQWCKQLFSSV
VPVLLGDPEEEPGGRQLLDLNCFLSDISDTLFTMTQSGSPFLQLPPEDAYVGNADMIQPDLTPLQPSLDDFMDIS
DFFTNSRLPQPPMPSNFPEPPSFSPVVDLSLSSGTLGPEVPPASSAMTHLSGHSRLQARNSCPGPLDSSAFLSSD
FLLPEDPKPRLPPPPVPPPLHYPPPAKVPGLEPCPPPPPPMAPPTALLQEEPLFSRPFPPFTVPPAPGVSPLP
APAAFPPTPQSVSPAPTFFPIELLPLGYSEPAFGPCFSMPRGKPPAPSPRGQKASPPTLAPATASPPTTAGSNN
PCLTQLLTAAKPEQALEPPLVSSSTLLRSPGSPQETVPEFFCTFLPPTPAPTTPRPPPGPATLAPSRPLLVPKAER
LSPPAPSGSERRLSGDLSSMPGPGTILSVRVSPQPILSRGRPDSNKTENRRITHISAEQKRRFNKLGFDLHGL
VSTLSAQPSLVSKATTLQKTAEYIILMLQQERAGLQEEAQQLRDEIEELNAAINLCQQQLPATGVPI THQRFQDM
RDMFDDYVTRTLHNWKFVWFVFSILIRPLFESFNGMVSTASVHTLRQTS LAWLDQYCSLPALRPTVLNSLRQLGTS
TSILTDPGRIPEQATRAVTEGTLGKPL

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FIGURE 2286

CCCCGCGCTGCGCGGAGCAGGGACCAGGCGGTTGCGGCGGCGACAGCCATGGCCGGCGCGCTGGCAGGTCTGGCC
GCGGGCTTGCAGSTCCCGCGGGTCGCGCCAGCCAGACTCGGACTCGGACACAGACTCGGAGGACCCGAGTCTC
CGGCGCAGCGCGGGCGGCTTGTCCGCTCGCAGGTTCATCCACAGCGGTCACTTCATGGTGTCTGTCGCCGCACAGC
GACTCGCTGCCCCGGCGGCGCGACCAGGAGGGTCCGTGGGGCCCTCCGACTTCGGGCGCGCAGTATCGACCCC
ACACTCACACGCTCTTCGAGTGCTTGAGCCTGGCCTACAGTGGCAAGCTGGTGTCTCCCAAGTGAAGAATTTTC
AAAGGCCCTCAAGCTGCTCTGCAGAGACAAGATCCGCCTGAACAACGCCATCTGGAGGGCCTGGTATATCCAGTAT
GTGAAGCGGAGGAAGAGCCCCGTGTGTGGCTTCGTGACCCCCCTGCAGGGGCCTGAGGCTGATGCGCACCGGAAG
CCGGAGGCCGTGGTCTTGAGGGGAACTACTGGAAGCGGCGCATCGAGGTGGTGTGATGCGGGAATACCACAAGTGG
CGCATCTACTACAAGAAGCGGCTCCGTAAGCCCAGCAGGGAAGATGACCTCCTGGCCCCCTAAGCAGGCGGAAGGC
AGGTGGCCGCCGCCGAGCAATGGTGCAAAACAGCTCTTCTCCAGTGTGGTCCCCGTGCTGCTGGGGGACCCAGAG
GAGGAGCCGGGTGGGCGGCAGCTCCTGGACCTCAATTGCTTTTTGTCCGACATCTCAGACACTCTCTTACCATG
ACTCAGTCCGGCCCTTCGCCCCTGCACTGCGCCTGAGGATGCCTACGTCGGCAATGCTGACATGATCCAGCCG
GACCTGACGCCACTGCAGCCAAGCCTGGATGACTTCATGGACATCTCAGATTTCTTTACCAACTCCCGCCTCCCA
CAGCCGCCCATGCTTTCAAACTTCCCAGAGCCCCCAGCTTCAGCCCCGTGGTTGACTCCCTCTTACAGCAGTGGG
ACCCTGGGCCCAGAGGTGCCCCCGGCTTCTCGGCCATGACCCACCTCTCTGGACACAGCCGTCTGCAGGCTCGG
AACAGCTGCCCTGGCCCCCTTGGACTCCAGCGCCTTCTGAGTTCTGATTTCTCCTTCTTGAAGACCCCAAGCCC
CGGCTCCCACCCCTCTGTACCCCCACCTCTGCTGCATTACCTCCCCCTGCCAAGGTGCCAGGCCTGGAGCCC
TGCCCCCACCTCCCTTCCCTCCCATGGCACCACCCACTGCTTTGCTGCAGGAAGAGCCTCTCTTCTCTCCCAGG
TTTCCCTTCCCCACCGTCCCTCCTGCCCCAGGAGTGTCTCCGCTGCCTGCTCCTGCAGCCTTCCCACCCACCCCA
CAGTCTGTCCCCAGCCAGCCCCACCCCTTCCCCATAGAGCTTCTACCTTGGGGTATTCCGGAGCCTGCCTTT
GGGCTTGTCTTCTCCATGCCCAGAGGCAAGCCCCCGCCCCATCCCCTAGGGGACAGAAAGCCAGCCCCCTACC
TTAGCCCCTGCCACTGCCAGTCCCCCACCCTGCGGGGAGCAACAACCCCTGCCTCACACAGCTGCTCACAGCA
GCTAAGCCGGAGCAAGCCCTGGAGCCACCCTTGTATCCAGCACCCTCCTCCGGTCCCCAGGGTCCCCGCAGGAG
ACAGTCCCTGAATTCCCTGCACATTCTTCCCCGACCCCGGCCCTACACCGCCCCGGCCACCTCCAGGCCCG
GCCACATTGGCCCCCTTCCAGGCCCTGCTTGTCCCCAAGCGGAGCGGCTCTACCCCCAGCGCCAGCGGCAGT
GAACGGCGGCTGTGAGGGGACCTCAGCTCCATGCCAGGCCCTGGGACTCTGAGCGTCCGTGTCTCTCCCCGCAA
CCCTCCTCAGCCGGGGCCGTCCAGACAGCAACAAGAACCGGCGTATCACACACATCTCCGCGGAGCAGAAGCGG
CGCTTCAACATCAAGCTGGGGTTTGACACCTTTCATGGGCTCGTGAGCACACTCAGTGGCCAGCCAGCCTCAAG
GTGAGCAAAGCTACCACGCTGCAGAAGACAGCTGAGTACATCCTTATGCTACAGCAGGAGCGTGCGGGCTTGCAG
GAGGAGGCCAGCAGCTGCGGGATGAGATTGAGGAGCTCAATGCCGCCATTAACTGTGCCAGCAGCAGCTGCCC
GCCACAGGGGTACCCATCACACACCAGCGTTTTTGACCAGATGCGAGACATGTTTGATGACTACGTCCGAACCCGT
ACGCTGCACAAC TGGAAGTTCTGGGTGTTT CAGCATCTCATCCGGCTCTGTTTGAGTCCTTCAACGGGATGGTG
TCCACGGCAAGTGTGCACACCCTCCGCCAGACCTCACTGGCCTGGCTGGACCACTGCTCTCTGCCCCGCTCTC
CGGCCAACTGTCTGAACTCCCTACGCCAGCTGGGCACATCTACCACTATCCTGACCGACCCGGGCGCATCCCT
GAGCAAGCCACACGGGCAGTCACAGAGGGCACCCCTTGGCAAACCTTTATAGTCTCTGGCCAGACCTTCTGCTCAC
TCAGCTGCCCTGGGGGCTGCTTTCCCTGGGCACGGGCTCCAGGGATCATCTCTGGGCACTCCCTTCTGCCCCAG
GCCCTGGCTCTGCCCTTCCCTGGGGGGTGGAGCAGGGTCCAGGTTTACACTTGCCACCTCCTGGAGGTCAAGAA
GAGCAGAGTCCCCGTCCCTGCTCTGCCACTGTGCTCCAGCACCCTGACCTTGGGTGACTCGTCCGCTGTCTTTGG
ACCGCTGTGTTTCAATCTGCAAAATGGGGATGGGGAAGGTTCAATCAGCAGATGACCCCCAGGCCTTGGCAGCTG
TGACATTGGGGGCTAGGCTGGCAACTCCGGGGGCTCAACGGTGGAAAGAGGAGGATGCTGTTTATCTGTACCT
CCACTTGCTCCCCGACAGGTGGGGCACAGACCTCTGTTTCTGAGCAGAGAAGCAGAAAAGGAGGTTCCCTCTCTC
TGCTCCTTCACTGCTGACCCAGAGGGGCTGCAGGATGGTTTTCCCTGGGAGAGGCCAGGAGGGCCTGATCCAGG
AGACACCAGGGCCAGAGTGACCACAGCAGGGCAGGCATCATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGGT
TTTGTAAGAATTCTTGACCAATAAAAGCAAAAACCTGTCTGCTGGTTAAAAA

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FIGURE 2287

MAGALAGLAAGLQVPRVAPSPDSDSDTDSDEP SLRRSAGGLLRSQVIHSGHEMVSSPHSDSLPRRRDQEGSVGPS
DFGPRSIDPTLTRLFECLSLAYSGKLVSPKWKNFKGLKLLCRDKIRLNNAIWRAWYIQYVKRRKSPVCGFVTPLO
GPEADAHRKPEAVVLEGNYWKRRIEVVMREYHKWRIYYKKRLRKPSREDDLLAPKQAEGRWPPPEQWCKQLFSSV
VPVLLGDPEEEPGGRQLLDLNCFLSDISDTLFTMTQSGPSPLQLPPEDAYVGNADMIQPDLTPLQPSLDDFMDIS
DFFTNSRLPQPPMPSNFPEPPSFSPVVDLSFSSGTLGPEVPPASSAMTHLSGHSRLQARNSCPGPLDSSAFLSSD
FLLPEDPKPRLPPPPVPPPLHYPPPAKVPGLEPCPPPPFFPPMAPPTALLQEEPLFSRPFPPFTVPPAPGVSPLP
APAAFPPTPQSVSPAPTTFPIELLPLGYSEPAFGPCFSMPRGKPPAPSPRGQKASPPTLAPATASPPTTAGSNN
PCLTQLLTAAKPEQALEPPLVSSTLLRSPGSPQETVPEFPCTFLPPTPAPTPPRPPPGPATLAPSRPLLVPKAER
LSPPAPSGSERRLSGDLSSMPGPGTLSVRVSPPQPILSRGRPDSNKNRRITHISAEQKRRFNIKLGFDTLHGLVS
TLAQPSLVSKATTLOKTAEYILMLQERAGLQEEAQQLRDEIEELNAAINLCQQQLPATGVPITHQRFQDMRD
MFDDYVRTRTLHNWKFVFSILIRPLFESFNGMVSTASVHTLRQTS LAWLDQYCSLPALRPTVLNSLRQLGTSTS
ILTDPGRIPEQATRAVTEGTLGKPL

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FIGURE 2288

GACGGCAAATGCGGACTTCGACACCTACGACGATCGGGCCTACAGCAGCTTCGGCGGCGGCAGAGGGTCCCCGCG
GCAGTGCTGGTGGCCATGGTTCCCGTAGCCAGAAGGAGTTGCCACAGAGCCCCCTACACAGCATACGTAGGAA
ATCTACCTTTCAATACGGTTCAGGGCGACATAGATGCTATCTTTAAGGATCTCAGCATAAGGAGTGACGGCTAG
TCAGAGACAAAGACACAGATAAATTTAAAGGATTCTGCTATGTAGAATTCGATGAAGTGGATTCCCTTAAGGAAG
CCTTGACATACGATGGTGCACCTGTTGGGCGATCGGTCACTTCGTGTGGACATTGCAGAAGGCAGAAAACAAGATA
AAGGTGGCTTTGGATTAGAAAAGGTGGACCAGATGACAGAGGAATGGGTAGCTCTCGAGAATCTAGAGGTGGAT
GGGATTCCCGGGATGACTTCAATTCTGGCTTCAGGGATGACTTCTTAGGGGGCAGGGGAGGTAGTCGCCCAGGCG
ACCGGCGAACAGGCCCCCCCCATGGGCAGCCGCTTCAGAGATGGCCCTCCCCTCCGTGGATCCAACATGGATTTC
GAGAACCCACAGAAGAGGAAAGAGCACAGAGACCACGACTCCAGCTTAAACCTCGAACAGTCGCGACGCCCCCTCA
ATCAAGTAGCCAATCCCAACTCTGCTATCTTCGGGGGTGCCAGGCCTAGAGAGGAAGTCGTTCAAAAGGAGCAAG
AATGAGCCTGCGGTTGGGAGGGAATGGGGCGTGGGGGGTTAGAGCAGGACCACAGCCTGGTGAGTCCCCGGGCAG
CCGTCTGCAGCCGCCACTCCTGCGCCTGCCATTGGCCTCCTCACAGCGGAAACACAGCTTGTGAGTGCATGTCA
GCTGTTAACAAGTGGTTTTTAGTACATTCTGGGCTTTGCTGTATCTATCTAGTGCCTGTTTGTGCGTTTTTTTCT
TTCTTCCGCTGCTTCCCCATTTTCTTCTGTCTTTTTCTCCTGCTCCTTGTTTTTCCAGCAGCACATGGGGTTC
CTCGGAGGAGCAGAGGTGGCCGCCGTGGGGGGGCGTTTTGGGCTGCGGTGCTGCGTCATTTTTCTTTGCTTTCTC
TTTACTTTAGACACTGGCCCCAACTCCAGGCGTTTTCTTTTATTCCCTCAGTGCTTCTCTTCTGACCTGCATGTTG
AGTTCGTGATTGCTGGGGCTTCCAACAAAAACCAGAGTCACTGACAGAGGGAACAGCAGAGACCTTGTTGGTATT
CAGCTGTGATGGATATAGAGAATCAGAGGCACCTTGTTTTTCACTAGGATAAAAAATATCTGCAGGGTCTTTTC
CATTCTATTTAGAGGGAGTCTTGCTCCATGACCCCTCCCGAGTGGACTGTCCAAGCAGATAGGCTCACACGA
GAAACAGTGAGGCTGAAAGGGGGGGCTATGGAAGAGCGGTAGGGAGTCCACGGAGAAGATGCAGTGAATGCTTGC
ATGCATTACACGTTGTGTGTGTCCAGCTAGTTCACTCCTTTGCGCGTGCGTGGTGGAGGCTGGCCTCTCTGGCT
GGGTGCACTGAATGGCCAGCGGGTTTCTTTTCTGCTGGGCCAAGGCGCTTTGGGGGTGGAGGGGGTGGTGCTGGT
GCTGCACTGGGCTGACTGCGGCGCTGACGCAGCGTTTCCCCCATCCCTGTTGCCTGTGTGTGTGTGTGGATCTGT
TCCTAGTATAGGCAACATAATGAGATACTGTGCTTCCCACCTCCCCCTTCAGTTCAGAGCCAAATGGGTCTAGAA
TCTGGCACTTTACTCATTTTCTTTGATAAATTGACTATGCAGAGCTGTCAGGAACCTTCAGATAGCAGTAGAGG
ACTGCAGCTGTCTAGGTCTGCGGCCACATCTTGGGGACACACTGGACTGTTCCCATGTGCAGGGTTTCAGCAGTTA
TGTGGGAGTGCTAGGGGTTAGGCTTTTGAGCTTGAACGCCTGCGTGTGAACAGATGAAAAATCCTTCAGTACCCA
AGTCCCAGTCTGTCTATGGGGAGCAGTTTGGGGGCGGCCGCGCAGCAGGAGCCTGGGAAAGAGGCCCTCGCCAGG
TGATGGCAGGGCCAGGGTGGCCTGGGGCACCCAGCGGAATGTGCTTAGTATTGGTACCAGCCGTCATCCTGGG
CTTTTCTACTGTGTCTTGTACAAGGCCTCAGCAATCCACAGAACTCTCTCTCCTTCCCTTCCACCTGTCAGCTT
CTCTGCTTCTGAGATAAGAACCATTGTGTAAACCAACACTTAACCTTCAGAAAGACATGCATTATGTGGTGTA
TCAAACCCGATGCTTTCAGATGACCTACTTACATCTTCAATGTGGATAAGATAAAGAACAAAAACATGCATCTA
AACTGCTGGGCAATCCAGTTGACTTTTAAATGTAAGAATGGAATTCCAAACACTTAACACATTAGCTATATGAC
AGAAAGTAAATCTATGGATATGGTATTTTGTGAATGATCTTTTAAATAAAAAGAAAACCTTACGTAATATTT

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FIGURE 2289

MADFDTYDDRAYSSFGGGRGSRGSAGGHGSRSQKELPTEPPYTAYVGNLPFNTVQGDIDAIFKDLSIRSVRLVRD
KDTDKFKGFCYVEFDEVDSLKEALTYDGALLGDRSLRVDIAEGRKQDKGGFGFRKGGPDDRGMGSSRESRGGWDS
RDDFNSGFRDDFLGGRGGSRPGDRTGPPMGSRFRDGPPLRGSNMDFREPTEEERAQRPLQLKPRTVATPLNQV
ANPNSAIFGGARPREEVVQKEQE

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FIGURE 2290

GACGGCAAATGGCGGACTTCGACACCTACGACGATCGGGCCTACAGCAGCTTCGGCGGCGGCAGAGGGTCCCGCG
GCAGTGCTGGTGGCCATGGTTCCCGTAGCCAGAAGGAGTTGCCACAGAGCCCCCTACACAGCATACGTAGGAA
ATCTACCTTTCAATACGGTTCAGGGCGACATAGATGCTATCTTTAAGGATCTCAGCATAAGGAGTGACGGCTAG
TCAGAGACAAAGACACAGATAAATTTAAAGGATTCTGCTATGTAGAATTGATGAAGTGGATTCCCTTAAGGAAG
CCTTGACATACGATGGTGCCTGTTGGGCGATCGGTCACTTCGTGTGGACATTGCAGAAAGGCAGAAAACAAGATA
AAGGTGGCTTTGGATTAGAAAAGGTGGACCAGATGACAGAGGCTTCAGGGATGACTTCTTAGGGGGCAGGGGAG
GTAGTCGCCCAGGCGACCGGCGAACAGGCCCCCCCATGGGCAGCCGCTTCAGAGATGGCCCTCCCTCCGTGGAT
CCAACATGGATTTAGAGAACCCACAGAAGAGGAAAGAGCACAGAGACCACGACTCCAGCTTAAACCTCGAACAG
TCGCGACGCCCCCTCAATCAAGTAGCCAATCCCAACTCTGCTATCTTCGGGGGTGCCAGGCCCTAGAGAGGAAGTCG
TTCAAAGGAGCAAGAATGAGCCTGCGGTTGGGAGGGAATGGGGCGTGGGGGGTTAGAGCAGGACCACAGCCTGG
TGAGTCCCCGGGCAGCCGTCTGCAGCCGCCACTCCTGCGCCTGCCATTGGCCTCTCACAGCGGAAACACAGCT
TGTGAGTGCATGTGAGCTGTTAACAAGTGGTTTTTAGTACATTCTGGGCTTTGCTGTATCTATCTAGTGCCGTGT
TGTGCGTTTTTTTTCTTTCTTCCGCTGCTTCCCCATTTTCTTCTGCTCTTTTCTCTGCTCCTTGTTTTCCCAG
CAGCACATGGGGTTCCTCGGAGGAGCAGAGGTGGCCGCCGTGGGGGGGCGTTTGGGCTGCGGTGCTGCGTCATTT
TTCCTTTGCTTTCTCTTTACTTTAGACACTGGCCCAACTCCAGGCGTTTCTTTTATTCCCTCAGTGCTTCTCTT
CTGACCTGCATGTTGAGTTCTGTATTGCTGGGGCTTCCAACAAAAACCAGAGTCACTGACAGAGGGAACAGCAGA
GACCTTGTTGGTATTAGCTGTGATGGATATAGAGAATCAGAGGCACCTTGTTTTCACTAGGATAAAAAATAT
CTGCAGGGTCCCTTTCCATTCTATTTAGAGGGAGTCTGGCTCCATGACCCCCCTCCCGAGTGGACTGTCCAAGCA
GATAGGCTCACACGAGAAACAGTGAGGCTGAAAGGGGGGGCTATGGAAGAGCGGTAGGGAGTCCACGGAGAAGAT
GCAGTGAATGCTTGATGCATTACACGTGTGTGTGTCCCAGCTAGTTCACTCCTTTCCCGTGCGTGTTGGAGG
CTGGCCTCTCTGGCTGGGTGCAGTGAATGGCCAGCGGGTTTCTTTTCTGCTGGGCCAAGGCGCTTTGGGGGTGGA
GGGGGTGGTGTGGTGTGCTGACTGGGCTGACTGCGGCGCTGACGCAGCGTTTCCCCCATCCCTGTTGCCTGTGT
GTTGTGTGGATCTGTTCTAGTATAGGCAACATAATGAGATACTGTGCTTCCACCTCCCTTCAGTTCAGAGCC
AAAATGGGTCTAGAATCTGGCACTTTACTCATTTCCTTTGATAAATTGTACTATGCAGAGCTGTGAGGAACCTTC
AGATAGCAGTAGAGGACTGCAGCTGTCTAGGCTCTGCGGCCACATCTTGGGGACACACTGGACTGTTCCCATGTGC
AGGGTTCAGCAGTTATGTGGGAGTGCTAGGGGTAGGCTTTTGAGCTTGAACGCCGTGCGTGTGAACAGATGAAAA
ATCCTTCAGTACCCAAGTCCCAGTCTGTCTATGGGGAGCAGTTTGGGGGCGGCCGCGCAGCAGGAGCCTGGGAAA
GAGGCCCTCGCCAGGTGATGGCAGGGCCAGGGTGGCTGGGGCAGCCAGCGGAATGTGCTTAGTATTTGGTCACC
AGCCGTGTCATCCTGGGCTTTTCTTACTGTGTCTTGTACAAAGGCTCAGCAATCCACAGAACTCTCTCTCCTTCT
TCCACCTGTGAGCTTCTCTGCTTCTGAGATAAGAACCATTGTGTAAACACCAACACTTAACCTCAGAAAGACATG
CATTATGTGGTGTAAATCAAACCCGATGCTTTAGATGACCTACTTACATCTTCAATGTGGATAAGATAAAGAACA
AAACACATGCATCTAAACTGCTGGGCAATCCAGTTGACTTTTAAATGTAAGAATGGAATTCCAAACACTTAACAC
ATTAGCTATATGACAGAAAGTAAATCTATGGATATGGTATTTTGTGAATGATCTTTTAAATAAAGAAAACCTT
ACGTAATATTT

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FIGURE 2291

MADFDTYDDRAYSSFGGGRGSRGSAGGHGSRSQKELPTEPPYTAYVGNLPFNTVQGDIDAIFKDLSIRSVRLVRD
KDTDKFKGFCYVEFDEVDSLKEALTYDGALLGDRSLRVDIAEGRKQDKGGFGFRKGGPDDRGFRDDFLGGRGGSR
PGDRRTGPPMGSRFRDGPPLRGSNMDFREPTTEEERAQRRLQLKPRTVATPLNQVANPNSAIFGGARPREEVVQK
EQE

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FIGURE 2292

GGGAAGAGGAGGCGCGAGAATGGAGGTGGAGGCCGTCTGTGGTGGCGCGGGCGAGGTGGAGGCCAGGACTCTGA
CCCTGCCCCTGCC TTCAGCAAGGCCCGGCGAGCGCCGGCCACTACGAACTGCCGTGGGTGAAAAATATAGGCC
AGTAAAGCTGAATGAAATTGTCGGGAATGAAGACACCGTGAGCAGGCTAGAGGTCTTTGCAAGGGAAGGAAATGT
GCCCAACATCATCATTGCGGGCCCTCCAGGAACCGGCAAGACCACAAGCATTCTGTGCTTGGCCCCGGGCCCTGCT
GGGCCCAGCACTCAAAGATGCCATGTTGGAACTCAATGCTTCAAATGACAGGGGCATTGACGTTGTGAGGAATAA
AATTAATGTTTGTCTAACAAAAAGTCACTCTTCCCAAAGGCCGACATAAGATCATCATTCTGGATGAAGCAGA
CAGCATGACCGACGGAGCCCAGCAAGCCTTGAGGAGAACCATGGAAATCTACTCTAAAACCACTCGCTTCGCCCT
TGCTTGTAATGCTTCGGATAAGATCATCGAGCCCATTCAGTCCCGCTGTGTCAGTCCTCCGGTACACAAAGCTGAC
CGACGCCCAGATCCTCACCAGGCTGATGAATGTTATCGAGAAGGAGAGGGTACCCTACACTGATGACGGCCTAGA
AGCCATCATCTTCACGGCCCAGGGAGACATGAGGCAGGCGCTGAACAACCTGCAGTCCACCTTCTCAGGATTTGG
CTTCATTAAACAGTGAGAACGTGTTCAAGGTCTGTGACGAGCCCCACCCACTGCTGGTAAAGGAGATGATCCAGCA
CTGTGTGAATGCCAACATTGACGAAGCCTACAAGATTCTTGCTCACTTGTGGCATCTGGGCTACTCACCAGAAGA
TATCATTGGCAACATCTTTCGAGTGTGTAACCTTCCAAATGGCAGAATACCTGAAACTGGAGTTTATCAAGGA
AATTGGATACTCACATGAAATAGCGGAAGGAGTGAATCTCTTTTGCAGATGGCAGGCCTCCTGGCAAGGCT
GTGTCAGAAGACAATGGCCCCGGTGGCCAGTTAGAGCAGAGACTTCACTGACTGACTTACAGGTGCCCTATTCTG
AGGTACAGGAGCCGCGGCTTTCTGATGGGGGAAATGCCGCTTAGGCTGGAGCCAACATGACTGTCCTTTAAAC
TCCAGTGGCTGGCCAGGCACGGTAGCTCACGCCTGTAATCCCAACACTTTGGGAGGCCGAGGCAGGTGGATCACC
TGAGGTGAGAAATTCAAGACCAGCCTGGCCAACATGGGGAAACCCTGTCTTTACTAAAAATATAAAAATTAGCTG
GGTGTGGTGGCGGGCACCTGTAATCCCAGCTACTCGGGAGGCTGTGGCAGGAGAATCGCTTGAACCCAGGAGGTG
GAGGTTGCAGTGAGCCAAGATCACACCATTGCCTCCAGCCTGGGCGACAGAGTCTCCATCTGGGGAAAAAATT
AAATAAATAAACTCCCG

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FIGURE 2293

TAAATGGCAGCCAATGGAGGGTGGTGTTCGCGGGGGCTGGGATTAGGGCCGGGGCGAATGGCTGGCAATCTTACT
GGGATTACAGAACAAAGAGCCTCCCCGCGCTCCCGCTCTCCGCTCCTCTCCCCGCGCCGCCCGCCCTCCGCCGC
AGCCCGCGCCGGGGGTGGGGGCCGCCGAGCGCCAGCCCCCGGCCGGCCGATTCCCCCCCCGCGCCCCCTCCCCG
CGCCTCCCTCCCCGCCCTCGCCGCGCCGCCGTCTCGCCTCCCTCTGCCTCTCCTTCCCCCATTCCTCCGGATTA
ATTAAGGAGGCGAGCGGCAGGAGGCTGAGTCCTGGCCGCGGGCCGGGGCCGGGGCGCCGCTGGCAGGAGCGCTTGG
GGATCCTCCAAGGCGACCAATGGCCTTGCTGGGTAAGCGCTGTGACGTCCCCACCAACGGCTGCGGACCCGACCGC
TGGAATCCGCGTTACCCGCAAAGACGAGATCATACCAGCCTCGTGTCTGCCTTAGACTCCATGTGCTCAGCG
CTGTCCAAACTGAACGCCGAGGTGGCCTGTGTGCGCGTGCACGATGAGAGCGCCTTTGTGGTGGGCACAGAGAAG
GGGAGAATGTTTCTGAATGCCCCGAAGGAGCTACAGTCAGACTTCCTCAGGTTCTGCCGAGGGCCCCGTGGAAG
GATCCGGAGGCGAGACCCCCAAGAAGGTGCAGCGGGGCGAGGGTGGAGGCCGTAGCCTCCCTCGGTCTCCCTG
GAACATGGCTCAGATGTGTACCTTCTGCGGAAGATGGTAGAGGAGGTGTTTGATGTTCTTTATAGCGAGGCCCTG
GGAAGGGCCAGTGTGGTGCCACTGCCCTATGAGAGGCTGCTCAGGGAGCCAGGGCTGCTGGCCGTGCAGGGGCTG
CCCGAAGGCCTGGCCTTCCGAAGGCCAGCCGAGTATGACCCCAAGGCCCTCATGGCCATCTGGAACACAGCCAC
CGCATCCGCTTCAAGCTCAAGAGGCCACTTGAGGATGGCGGGCGGGACTCGAAGGCCCTGGTGGAGCTGAACGGT
GTCTCCCTGATTCCCAAGGGGTACGGGACTGTGGCCTGCATGGCCAGGCCCCCAAGGTGCCACCCAGGACCTG
CCCCCAACCGCCACCTCCTCCTCCATGGCCAGCTTCTGTACAGCACGGCGCTCCCCAACACGCCATCCGAGAG
CTCAAGCAGGAAGCACCTTCTGCCCCCTTGCCCCCAGCGACCTGGGCCTGAGTCGGCCCATGCCAGAGCCCAAG
GCCACCGGTGCCCAAGACTTCTCCGACTGTTGTGGACAGAAGCCCACTGGGCCTGGTGGGCCTCTCATCCAGAAC
GTCCATGCCTCCAAGCGCATTCTCTTCTCCATCGTCCATGACAAGTCAGAGAAGTGGGACGCCCTTCATAAAGGAA
ACCGAGGACATCAACACGCTCCGGGAGTGTGTGCAGATCCTGTTTAAACAGCAGATATGCGGAAGCCCTGGGCCTG
GACCACATGGTCCCCGTGCCCTACCGGAAGATTGCCTGTGACCCGGAGGCTGTGGAGATCGTGGGCATCCCGGAC
AAGATCCCCCTTCAAGCGCCCCCTGCACTTATGGAGTCCCCAAGCTGAAGCGGATCCTGGAGGAGGCCATAGTATC
CACTTCATCATTAAAGAGGATGTTTGATGAGCGAATTTTACAGGGAACAAGTTTACCAAAGACACCACGAAGCTG
GAGCCAGCCAGCCCCGCCAGAGGACACCTCTGCAGAGGTCTTAGGGCCACCGTCCTTGACCTTGCTGGGAATGCT
CGGTGAGACAAGGGCAGCATGTCTGAAGACTGTGGGCCAGCAACCTCCGGGGAGCTGGGCGGGCTGAGGCCGATC
AAAATTGAGCCAGAGGATCTGGACATCATTAGGTACCGTCCAGACCCCTCGCCAACCTCTGAGGAAATGACA
GACTCGATGCCTGGGCACCTGCCATCGGAGGATTCTGTTTATGGGATGGAGATGCTGACAGACAAAGGTCTGAGT
GAGGACGCGCGGCCGGAGGAGAGGCCCGTGGAGGACAGCCACGGTGACGTGATCCGGCCCCCTGCGGAAGCAGGTG
GAGCTGCTCTTCAACACACGATACGCCAAGGCCATTGGCATCTCGGAGCCCGTCAAGGTGCCGTACTCCAAGTTT
CTGATGACCCCGGAGGAGCTGTTTGTGGTGGGACTGCCTGAAGGCATCTCCCTCCGAGGCCCAACTGCTTCGGG
ATCGCCAAGCTCCGGAAGATTCTGGAGGCCAGCAACAGCATCCAGTTTGTGATCAAGAGGCCCGAGCTGCTCACT
GAGGGAGTCAAAGAGCCCATCATGGATAGTCAAGGAAGTGCCTCCTCACTTGCTTCTCTCCCCCTGCCCTGCCC
CCAGAGAGGGATTCCGGGGACCCCTCTGGTGGACGAGAGCCTGAAGAGACAGGGCTTTCAAGAAAATTATGACGCG
AGGCTCTCACGGATCGACATCGCCAACACACTAAGGGAGCAGGTCCAGGACCTTTTCAATAAGAAATACGGGGAA
GCCTTGGGCATCAAGTACCCGGTCCAGGTCCCCTACAAGCGGATCAAGAGTAACCCCGGCTCCGTGATCATCGAG
GGGCTGCCCCCAGGAATCCCGTTCCGAAAGCCCTGTACCTTCGGCTCCAGAACCTGGAGAGGATTCTTGCTGTG
GCTGACAAGATCAAGTTCACAGTCACCAGGCCTTTTCAAGGACTCATCCCAAAGCCTGATGAAGATGACGCCAAC
AGACTCGGGGAGAAGGTGATCCTGCGGGAGCAGGTGAAGGAACCTTCAACGAGAAATACGGTGAGGCCCTGGGC
CTGAACCGGCCGGTGCTGGTCCCTTATAAACTAATCCGGGACAGCCAGACGCCGTGGAGGTACGGGTCTGCCT
GATGACATCCCCCTTCCGGAACCCCCAACACGTACGACATCCACCGCTGGAGAAGATCCTGAAGGCCCGAGAGCAT
GTCCGCATGGTCATCATTAAACCAGCTCCAACCCCTTTGCAGAAATCTGCAATGATGCCAAGGTGCCAGCCAAAGAC
AGCAGCATTCCCAAGCGCAAGAGAAAGCGGGTCTCGGAAGGAAATTCGCTCTCCTCTTCTCCTCGTCTTCTCT
TCTCTGCTCTTAACCCGGATTCACTGGCATCGGCCAACAGATCTCACTCGTGCAATGGCCAATGTACATGGTG
GACTATGCCGGCCTGAACGTGCAGCTCCCGGGACCTCTTAATTACTAGACCTCAGTACTGAATCAGGACCTCACT
CAGAAAGACTAAAGGAAATGTAATTTATGTACAAAATGTATATTCCGATATGTATCGATGCCTTTTAGTTTTTCC
AATGATTTTTTACACTATATTCTGCCACCAAGGCCTTTTTAAATAAGTAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2294

MALLGKRCDVPTNGCGPDRWNSAFTRKDEIITSLSVSALDSMCSALSKLNAEVACVAVHDESAFVVGTEKGRMFLN
ARKELOSDFLRFCRGPPWKDPEAEHPKKVQRGEGGGRSLPRSSLEHGSDVYLLRKMVEEVFDVLYSEALGRASVV
PLPYERLLREPGLLAVQGLPEGLAFRRPAEYDPKALMAILEHSHRIRFKLRPLEDGGGRDSKALVELNGVSLIPK
GSRDCGLHGQAPKVPPQDLPTATSSSMASFLYSTALPNHAIRELKQEAPSCPLAPSDLGLSRPMPEPKATGAQD
FSDCCGQKPTGPGGPLIQNVHASKRILFSIVHDKSEKWDAFIKETEDINTLRECVQILFNSRYAEALGLDHMPV
PYRKIACDPEAVEIVGIPDKIPFKRPCTYGVPKLKRILEERHSIHFI IKRMFDERIFTGNKFTKDTTKLEPASPP
EDTSAEVSRA TVLDLAGNARSDKGSMS EDCGPGTSGELGGLRPIKIEPEDLDIIQVTVDPSP TSEEMTDSMPGH
LPSEDSGYGMEMLTDKGLSEDARPEERPVEDSHGDVIRPLRKQVELLFNTRYAKAIGISEPVKVPYSKFLMHPEE
LFVVGLPEGISLRRPNCFGIAKLRKILEASNSIQFVIKRPELLTEGVKEPIMDSQGTASSLGFSPPALPPERDSG
DPLVDESLKRQGFQENYDARLSRIDIAN TLREQVQDLFNKKYGEALGIKYPVQVPYKRIKSNPGSVIIIEGLPPGI
PFRKPCTFGSQNLERILAVADKIKFTVTRPFQGLIPKPEDDANRLGEKVILREQVKELFNEKYGEALGLNRPVL
VPYKLIRDSPDAVEVTGLPDDIPFRNPNTYDIHRLEKILKAREHVRMVIINQLQPF AEICNDAKVP AKDSSIPKR
KRKR VSEGN SVSSSSSSSSSSSSSNPDSVASANQISLVQWPMYMDYAGLNVQLPGPLNY

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FIGURE 2295A

AGGAGGAGGAGGGTGAGAGAGAAGCTGGGAGAGCAGAGAAAAGGGGGCCACCGGTCGCCCCCGCTTCCCCGCAC
GCGCTCTCCAGCCGCGGCCCGCCGCTGCCGCGGTACCCCGGCCTCTGCCTCTGTCCCCAGTGATCGGATCAA
GGCGCTGAGCGAGGGCCCTGCCTGCGGGGCGGCCATGCGGCGGTGACAGGAGCGCGACCGACACGCACGGGCCCCCT
CGCCCCCTCTCGCTCCCGTCCGCTCGCCAGCTCCCTCAGCCGAGGCTGCTCCGCGGCGGCCGAGCCCGCGCG
CGGCCACACTCGCCTCCCTCGGCACCCCGGCCCGGAGCTGCCTGGAGGCGGCCGCACTCGGGGATCATGGC
CCAAGTTGCAATGTCCACCCTCCCGTTGAAGATGAGGAGTCTCGGAGAGCAGGATGGTGGTGACATTCTCAT
GTCAGCTCTCGAGTCCATGTGTAAAGAACTGGCCAAGTCCAAAGCCGAAGTGGCTGCATTGCAGTGTATGAAAC
AGACGTGTTTGTCTCGTGGAACTGAAAGAGGACGTGCTTTTGTCAATACCAGAAAGGATTTTCAAAAAGATTTTGT
AAAATATTGTGTTGAAGAAGAAGAAAAAGCTGCAGAGATGCATAAAATGAAATCTACAACCCAGGCAAAATCGGAT
GAGTGTAGATGCTGTAGAAATTGAAACACTCAGAAAAACAGTTGAGGACTATTTCTGCTTTTGCTATGGGAAAGC
TTTAGGCAAAATCCACAGTGGTACCTGTACCATATGAGAAGATGCTGCGAGACCAGTCGGCTGTGGTAGTGACAGG
GCTTCCGGAAGGTGTTGCCTTTAAACACCCCGAGAATATGATCTTGCAACCCTGAAATGGATTTTGAGAGAACAA
AGCAGGGATTTTATTTCATTATTAAGAGACCTTTTTTAGAGCCAAAGAAGCATGTAGGTGGTCTGTGTATGGTAAC
AGATGCTGACAGGTCAATACTATCTCCAGGTGGAAGTTGTGGCCCCATCAAAGTGAAACTGAACCCACAGAAGA
TTCTGGCATTTCCTTGAAATGGCAGCTGTGACAGTAAAGGAAGAATCAGAAGATCCTGATTATTATCAATATAA
CATTCAAGCAGGCCCTTCTGAACTGATGATGTTGATGAAAAACAGCCCTATCGAAGCCTTTGCAAGGAAGCCA
CCATTCTTCAGAGGGCAATGAAGGCACAGAAATGGAAGTACCAGCAGAAGATTCTACTCAACATGTCCCTTCAGA
AACAAGTGAGGACCCTGAAGTTGAGGTGACTATTGAAGATGATGATTATCTCCACCGTCTAAGAGACCAAAGGC
CAATGAGCTACCGCAGCCACCAGTCCCGGAACCCGCCAATGCTGGGAAGCGGAAAGTGAGGGAGTTCAACTTCGA
GAAATGGAATGCTCGCATCACTGATCTACGTAAACAAGTTGAAGAATTGTTTGAAGGAAATATGCTCAAGCCAT
AAAAGCCAAAGGTCCGGTGACGATCCCGTACCCTCTTTTCCAGTCTCATGTTGAAGATCTTTATGTAGAAGGACT
TCCTGAAGGAATTCTTTTAGAAGGCCATCTACTTACGGAATTCTCGCTGGAGAGGATATTACTTGCAAAGGA
AAGGATTCGTTTTGTGATTAAAGAAACATGAGCTTCTGAATTCAACACGTGAAGATTTACAGCTTGATAAGCCAGC
TTCAGGAGTAAAGGAAGAATGGTATGCCAGAATCACTAAATTAAGAAAGATGGTGGATCAGCTTTTCTGCAAAA
ATTTGCGGAAGCCTTGCGGAGCACTGAAGCCAAGGCTGTACCGTACCAGAAATTTGAGGCACACCCGAATGATCT
GTACGTGGAAGGACTGCCAGAAAACATTCTTTCCGAAGTCCCTCATGGTATGGAATCCCAAGGCTGGAAAAAAT
CATTCAAGTGGGCAATCGAATTAATTTGTATTATAAAGACAGAACTTCTGACTCACAGTACCCTGAAGTTAC
TCAGCCAAGAACAATACACAGTCAAGGAAGATTGGAATGTGAGAATTACCAAGCTACGGAAGCAAGTGGAAGA
GATTTTTAATTTGAAATTTGCTCAAGCTCTTGGACTCACCGAGGCAGTAAAAGTACCATATCCTGTGTTTGAATC
AAACCCGGAGTTCTTGTATGTGGAAGGCTTGCCAGAGGGGATTCCCTTCCGAAGCCCTACCTGGTTTGGAAATCC
ACGACTTGAAAGGATCGTCCGCGGGAGTAATAAAATCAAGTTCGTTGTTAAAAAACCTGAACTAGTTATTTCTTA
CTTGCTCCTGGGATGGCTAGTAAATAAACACTAAAGCTTTGCAGTCCCCAAAAGACCACGAAGTCTTGGGAG
TAATTCAAAGGTTCTGAAATTGAGGTACCGTGGAAGGCCCTAATAACAACAATCCTCAAACCTCAGCTGTTCCG
AACCCCGACCCAGACTAACGGTTCTAACGTTCCCTTCAAGCCACGAGGGAGAGAGTTTTCTTTGAGGCCTGGAA
TGCCAAAATCACGGACCTAAAACAGAAAGTTGAAAATCTCTTCAATGAGAAATGTGGGGAAGCTCTTGGCCTTAA
ACAAGCTGTGAAGGTGCCGTTTCGCGTTATTTGAGTCTTTCCCGGAAGACTTTTATGTGGAAGGCTTACCTGAGGG
TGTGCCATTCCGAAGACCATCGACTTTTGGCATTCCGAGGCTGGAGAAGATACTCAGAAAACAAAGCCAAAATTA
GTTTCATCATTAAAAAGCCCGAAATGTTTGAGACGGCGATTAAAGGAGAGCACCTCCTCTAAGAGCCCTCCAGAAA
AATAAATTCATCACCCAATGTTAATACTACTGCATCAGGTGTTGAAGACCTTAACATCATTACGGTGACAATTCC
AGATGATGATAATGAAAGACTCTCGAAAGTTGAAAAAGCTAGACAGCTAAGAGAACAAAGTGAATGACCTCTTTAG
TCGGAAATTTGGTGAAGCTATTGGTATGGGTTTTCTGTGAAAGTTCCCTACAGGAAAATCACAATTAACCCCTGG
CTGTGTGGTGGTTGATGGCATGCCCCGGGGGTGCTTTCAAAGCCCCCAGCTACCTGGAAATCAGCTCCATGAG
AAGGATCTTAGACTCTGCCGAGTTTATCAAATTCACGGTCATTAGACCATTTCAGGACTTGTGATTAATAACCA
GCTGTTGATCAGAGTGAGTCAGAAGGCCCCGTGATACAAGAATCAGCTGAACCAAGCCAGTTGGAAGTTCCAGC
CACAGAAGAAATAAAGAGACTGATGGAAGCTCTCAGATCAAGCAAGAACCAGACCCACGTGGTAGACCTCTTC
CCTCCTAGGCTTAAAGTATCAGTGGTTGAGAAGAGCTTTTCGGACCTGTACTACCCCAAGCTGTGTAATATACT
TGTATAACAGAAATACCTTCTATACAACCTTTTTTTCTACTTTTAGATAGAAATGTCTACTTTTTTCAGCAGTTC
TGTGAATTAAGAGCAGAGTGACTGTGGTCTGGAATGGCTGGTGTACTTGGGAATGTACTATCAGGATTTTACA

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FIGURE 2295B

GCAATGCTGGGAAATGACAGGGAAAATGACAGGAATGAATCTCACCAGATTTTTTATGTACTCAGCAGAGCCTTG
AGTTACGGTGTTTTATTTTCCAATCAAGTGAAGATATCTCCTACTTCTCCTACTGGAACATCTCAGCTTCTGCAGT
GAAGAAAAATTCCTGTGATAGTTTCAGTTCTTTAGTTTTTCTATTTGAAAAAAAAAATCATTTAAATGATCCTTT
GTTACGGCTCTCCTTAATGACTGAGTGAACAGTTCCTATCTGTATATTTGACTAAACCTTTTCCTAAGCTATCT
CTCATGGTTTCTATGTTTTTTTATCATAATTTAAAGCAAACCATCTGGATCACCTAACAGTCAGAGGTCAGTAT
CTCAGCGTGTGAATTATAGAGGAAATACAGAGAGAACCTCTTCCACTTTTACTTTTCGTCCAAATAAAATGCATG
GTGTACCAGAAGTTGAAGATCGGGTTGAGGATTGGGGCTAGCTCGATGACACTAAGGCCCAACATCGCGGGACC
TGCTGTGGCGCGGATTCTTAGGAACGCTGTTCTAGCCGGCCCCCTCTCCAGGGGTCGCGTGGCCGGCATTATTTT
CTAGTTCTTCTTGTAACCCTGAGGTGCCAGCGCGGGGAGTGAGGAGGGTCAGGGGGCTAAGGATGCAACCTCTG
ACGTTCTGCGCCTTCTAGGAGAGTCTTACATGTGTTGAGATTTACAAGCAATGCGAGTTGTAAATACCAGCT
CTACAAGAAGCTAGGCTCTGTGACGGCATAGTTTTCAGTAGCTTTATCACAATATTCACAATGGAGAATTATATG
ACATGGTAGCAGAAATAGGCCCTTTTATGTGTTGCTTCTATTTTACCTCAAATTGTAGATATAGGGTAATCAATA
AAATCCATCCATGCCTTTTACACACTAAAAAGTCGGA

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FIGURE 2296

MAQVAMSTLPVEDEESSES RMVVTFLMSALES MCKELAKSKAEVACIAVYETDVFVVGTERGRAFVNTRKDFQKD
FVKYCVEEEEKAAEMHKMKSTTQANRMSVDAVEIETLRKTVEDYFCFCYGKALGKSTVVPVPYEKMLRDQSAVVV
QGLPEGVAFKHPENYDLATLKWILENKAGISFIIKRPFLPKKHVGGVMVTDADRSILSPGGSCGPIKVKTEPT
EDSGISLEMAAVTVKEESED PDYYQYNIQAGPSETDDVDEKQPLSKPLQGS HHSSEGNEGTEMEVPAEDSTQHVP
SETSEDPEVEVTIEDDDYSPPSKRPKANELPQPPVPEPANAGKRKVREFNF EKWNARITDLRKQVEELFERKYAQ
AIKAKGPVTIPYPLFQSHVEDLYVEGLPEGIPFRPSTYGIPRLERILLAKERIRFVIKKHELLNSTREDLQLDK
PASGVKEEWYARITKLRKMVDQLFCKKFAEALGSTEAKAVPYQKFEAHPNDLYVEGLPENIPFRSPSWYGIPRLE
KIIQVGNRIKFVVIKRPPELLTHSTTEVTQPRNTNPVKEDWNVRITKLRKQVEEIFNLKFAQALGLTEAVKVPYPVF
ESNPEFLYVEGLPEGIPFRSPTWFGIPRLERIVRGSNKIKFVVKKPELVISYLP PGMASKINTKALQSPKRPRSP
GSNSKVPEIEVTVEGPNNNNPQTSAVRTPTQTNGSNVPFKPRGREFSFEAWNAKITDLKQKVENLFNEKCGEALG
LKQAVKVPFALFESFPEDFYVEGLPEGVPFRPSTFGIPRLEKILRNKAKIKFIKKPEMFETAIKESTSSKSP
RKINSSPNVNTTASGVEDLNI IQVTIPDDDNERLSKVEKARQLREQVNDLFSRKFGAIGMGFPVKVPYRKITIN
PGCVVVDGMPPGVSFKAPSYLEISSMRRIILDSAEFIKFTVIRPFPGLVINNLVDQSESEGPVIQESAEP SQLEV
PATEEIKETDGSSQIKQEPDPTW

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FIGURE 2297

GCGACTTCCTCTTTCCAGTGCAATTTAAGGCGCAGCCTGGAAGTGCCAGGGAGCACTGGAGGCCACCCAGTCATGG
GGGACACCTTCATCCGTACATCGCCCTGCTGGGCTTTGAGAAGCGCTTCGTACCCAGCCAGCACTATGTGTACA
TGTTCTTGGTGAAATGGCAGGACCTGTGCGAGAAGGTGGTCTACCGGCGCTTCACCGAGATCTACGAGTTCCATA
AAACCTTTAAAGAAATGTTCCCTATTGAGGCAGGGGCGATCAATCCAGAGAACAGGATCATCCCCACCTCCCAG
CTCCCAAGTGGTTTGACGGGCAGCGGGCCGCCGAGAACCGCCAGGGCACACTTACCGAGTACTGCGGCACGCTCA
TGAGCCTGCCCCACCAAGATCTCCCGCTGTCCCCACCTCCTCGACTTCTTCAAGGTGCGCCCTGATGACCTCAAGC
TCCCCACGGACAACCAGACAAAAAGCCAGAGACATACTTGATGCCCAAAGATGGCAAGAGTACCGCGACAGACA
TCACCGGCCCCATCATCCTGCAGACGTACCGCGCCATTGCCAACTACGAGAAGACCTCGGGCTCCGAGATGGCTC
TGTCCACGGGGGACGTGGTGGAGGTCGTAGAGAAGAGCGAGAGCGGTCAGACCTCCACCTTACGGGGCTCCTTC
CCCTGGTGCTCAGGAACCCACAGCCACAAGCCCCCTGCCAAGGCTCAGGCAGCCTTGCCCCCTGGGAGGACTCCGG
CTCTGTTAGGGGCCCTAAATGTCCTCCCCACACTGTGGGTGCGCTTCTGTCTTAGTGTGCACCCCTGTGGTGGCTG
TGGGCATCTGTGCTTGGCAGGCCGGGGCGGGGCATGTCTGCGTGTCTGTCTGGATGGGTATGGGACCGTCTGTT
CATTATGAAGTGGGCTCAGAGCTGTGATTCTGTGAGCATGTGTGCATGCATGCATGTGACCTCATTGTCCGGTGT
GGTGAAGGTGACATTTCCAAATCTGAGCATTGGACATCAGTGTGTCTGTGTCCCTGTGTCTCACCATCCCTGAT
GGCTGCAGGGAGCCGCTGGGCCCTGCCCCCTCAGTCACATTCCCGCACCTCTGGCACAGGTTGGTGGTTCTGTGTCAG
ATGAAAGCAAAGCGAGGCTGGATCCCAGCGTCCTTCCTCGAGCCCCCTGGACAGTCCTGACGAGACGGAAGACCT
G

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FIGURE 2298

MGDTFIRHIALLGFEKRFVPSQHYVYMFLVKWQDLSEKVVYRRFTEIYEFHKTLEMFPIEAGAINPENRIIPHL
PAPKWFDGQRAAENRQGTLTEYCSLMSLPTKISRCPHLLDFFKVRPDDLKLPTDNQTKKPETYLMPKD GKSTAT
DITGP IILQTYRAIANYEKTSGSEMALSTGDVVEVVEKSESGQTSHLTGLLPLVLRNPQPQAPCQSGSLAPGR
PALLGALNVLP TLWVAFCLSVHPVVAVGICAWQAGAGHVCFCLDGYGTVC SL

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FIGURE 2299A

GAGCCCCAGGGAGGCGGATCTGGGCCCCGAGAAGGACACCCGCTGGATTGCCCCGTAGGCCCCGGCCCCGGGCCCC
CTCGGGAGCAGAACAGCCTTGGTGAGGTGGACAGGAGGGGACCTCGCGAGCAGACGCGCGGCCAGCGACAGCAG
CCCCCCCCGGCCTCTCGGGAGCCGTGGGGCAGAGGCTGCGGAGCCCCAGGAGGGGGCCAGTGTCAATTCAAAGATG
TGGCTGTGGATTTACCCAGGAGGAGTGGCGGCACTGGACCCTGATGAGAAGATAACATACGGGGATGTGATGT
TGGAGAATAACAGCCATCTAGTTTCCCTTGGCTTATGAGGTGGCAACATCTTGTACTTCGGAGATTCTGAAGCCGA
GCAACTTGCCCCAAGTCCTTCTTCTTTTCCCATTAACAAGATATGATATCACCAAGCCAAACGTCATCATTAAAGTT
GGAGCAGGGAGAGGAGCTGTGGATAACGGGAGGTGAATTTCCATGTCAACATAGTCCAGCCCCCTCACATCCTCAG
CCGAAGATCTCACTTCGTCCCAGAGGCCTTTGCTGACTGACCCCTCAGGGATCGTGGGACTTTACCAGATCGGTT
TGTAATAACACCTCGAAGACGCTATCCGATCCATCAGACCCAGTATTCTGTCCGGGGGTACTTTCCACAGTGTG
CTGGAATGGTTATCACAAGAAGGCTGTGCTGTCCCTCGCAACTCCAGGATGGTGTGTAGCCAGTGACTGTGAG
GATCGCCCCCTCCTGACAGAAGATTTTACGTTTCTGCGATACCAGAGCAGATAATCAGCTCAACACTGTCTGTCACC
ATCAAGTAATGCCCCAGACCCATGTGCAAAGGAGACTGTACTGAGTGCCCTCAAAGAGAAGAAGAAGAAAAGGAC
AGTGGAGGAAGAAGACCAAAATATTCTTGATGGCCAGGAAAAATAAAGAAGGCGCCATGATAGCAGTGGCAGTGG
ACATTCAGCATTGAGCCCCCTGGTGGCCAGTGGAGTCCCCGCTTCTTTTGTGCCTAAGCCTGGGTCTCTGAAGAG
AGGCCTCAATTCTCAGAGCTCAGATGACCACTTGAATAAGAGATCCCGAAGCTCTTCCATGAGCTCCTTGACAGG
CGCTTACACAAGTGGCATCCCTAGCTCCAGCCGCAATGCCATTACCAGTTCTTACAGCTCCACTCGAGGCATCTC
ACAGCTCTGGAAGAGAAATGGCCCCAGTTTCATCACCCCTTCTCTAGCCCAGCCTCATCCCGCTCCAGACACCGGA
GAGGCCAGCAAAGAAAATAAGAGAAGAAGAGCTGTGTCACTATTCCAGTTCTTCAACTCCATTGGCAGCAGACAA
GGAGTCCCAGGGAGAAAAGGCTGCAGATACAACCCCAAGGAAGAAACAAAACCTCGAATTCTCAGTCTACACCTGG
CAGCTCTGGGCAGCGTAAGCGGAAAGTTGAGCTGCTGCCTTCTCGGCGAGGGGAACAGCTGACCTTGCCTCCACC
TCCCCAGCTTGGCTATTTCGATCACTGCCGAGGACCTAGACTTAGAGAAGAAGGCTTCATTACAGTGGTTCAACCA
GGCCTTGAGGACAAAGAGTGATGCTGCCTCGAACTCTGTCACTGAGACCCACCTACCACTCAGCCTTCATTTAC
CTTIACCCTGCCTGCTGCTGCAACTGCCTCCCCACCCACCTCCCTCCTGGCCCCAAGCACCAACCCACTGTTAGA
GAGCTTGAAGAAGATGCAGACTCCCCGAGCCTGCCACCTTGCCAGAATCTGCTGGAGCAGCAACCACTGAGGC
CCTCTCACCTCCAAAGACACCCAGCCTCCTACCCCCGCTGGGTTTATCACAGTCAGGGCCGCCAGGGCTGCTCCC
CAGCCCCCTCCTTTGACTCCAAACCCCCGACCACTTGTCTGGGGCTGATCCCTGCTCCATCCATGGTACCAGCCAC
TGACACCAAGGCACCTCCAACCTTCAAGCAGAGACGGCTACCAAACCCCAAGCCACATCTGCCCCGTCCCCCGC
CCCCAAGCAAAGCTTCTGTTTGAACACAGAACACCTCACCTTCCAGCCTGCGGCCCTGCTGCATCTTCAGC
ATCTCCCATGTTCAAGCCATTTTACGGCTCCACCCAAGAGTGAGAAGGAAGGCCCCACACCGCTGGCCCTTC
AGTCACAGCCACAGCGCCCTCCAGCTCCTCCCTCCCCACGACCACAGCACCACAGCCCCGACCTTCAGCCTGT
CTTTAGCAGCATGGGGCCACCTGCATCTGTGCCCTTGCCCTGCTTCTTCAAGCAGACAACACTACTCCGCCAC
TGCTCCCAACCAACTGCCCCGCTCTTCACTGGCCTGGCCAGCGCCACCTCTGCTGTGGCTCCCATCCTCTGC
CAGTCCATCCACAGACTCTGCTTCGAAGCCTGCGTTTGGCTTTGGCATAAACAGTGTGAGCAGCAGCAGTGTGAG
TACCACGACCAAGCAGCCGCACTGCCGCTCACAGCCTTTCTCTTCGGGGCGCCCCAGGCCTCTGCTGCCAGCTT
CACCCCGGCCATGGGCTCCATATTCCAGTTTGGCAAACCTCCTGCCTTGCCACAACCACCACAGTCACCACCTT
CAGCCAGTCCCTGCCCACTGCCGTGCCAACGGCCACCAGCAGCAGCGCTGCCGACTTTAGTGGTTTTGGCAGCAC
CCTCGCCACCTCCGCCCCGGCCACCAGCAGCCAGCCACTCTGACGTTTCAAGTAACACGAGCACCCCCACGTTCAA
CATTCCCTTTGGCTCAAGCGCCAAGTCCCCGCTCCCATCATATCCGGGAGCCAACCCCCAGCCCGCATTGGGGC
CGCTGAGGGGCAGCCACCGGGGGCGGCCAAGCCAGCCCTTACCCCCAGCTTTGGCAGCTCTTTCACTTTTGGAAA
CTCTGCAGCCCCGGCCCCGGCTACTGCACCCACACCTGCACCTGCGTCCACGATCAAGATCGTGCCTGCGCACGT
GCCTACGCCCATCCAGCCTACCTTTGGCGGTGCCACGCACTCGGCGTTTTGGATTGAAAGCCACGGCTTCCGCCTT
CGGCGCTCCCGCCAGCTCACAGCCCGCCTTTGGCGGTCCACTGCTGTCTTCTCCTTCGGTGCAGCCACCAGCTC
CGGCTTTGGAGCCACCACCCAGACCGCCAGCAGCGGGAGCAGCAGCTCGGTGTTTGGCAGCACAAACCATCACC
CTTACGTTTTGGGGTTTGGCAGCCCCGCTGGCAGTGGGAGCTTTGGGATCAACGTGGCCACCCAGGCTCCAG
CGCCACCACCGGAGCTTTAGCTTTGGAGCAGGACAGAGTGGGAGCACAGCCACCTCCACCCCTTACAGGGGG
CTTAGGTGAGAACGCCCTGGGCACCAACGGCCAGAGCACACCGTTTTGCCTTCAACGTGGGCAGCACAACTGAGAG
CAAACCTGTGTTTTGGAGGCACCGCCACCCCCACCTTTGGTTCAGAACACCCCTGCGCCTGGAGTGGGCACATCGGG
CAGCAGCCTCTCCTTTGGGGCATCTTCAGCACCCGCCCAAGGCTTTGTTGGTGTGGACCGTTCCGGCAACACTTT

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FIGURE 2299B

TGCTCACCAGCAAGAACACAGCCCCGAGGAAGGGACCCAATAACCTTTCAAATGCAAAGTCTGCCTGCGGTGAG
GGCCCAGGGTCTCCACGGAGAGGACAGGCATCTTCTTTCCACCAGGAAGGAGTCAGCCTGGAGCCTCTGCTA
TGTGCAAGGCGGTGTGCAAGCACCGGCTGCGGCTCTTTGCTGTCTCTTTCTTTCTTTGGGGCTGGGCTGGGTGT
GCGTTCTGGTGTGATGCTTTGGCCCTGTGAGGCTGAGCTAGAGAAGTGTAGATGTTAGATGTGCCAGTACCATCC
TGCGCTCCCAAGCATGCCCCACTCACTCACGTCGGCATCTCGACCCGTTCAATTACAGCAACGAAGAAGCCAC
CGCTAAGCGTGGTCTTGGGGGAAGCCCGGAGGCAGTGCTCGGCACCCGGGAACGTGCTCAGGCCTCGGTGGGGCC
GGGCAGGCAGGGCGGGAGCTAGCCTGCAAGAGAAAACAGCCCCAATGCTGGGTAAGAGAGCAGTTACCCCCATCCC
CCCCCTCCACGACCTGGCGCCCGCCCTGTACCTGAAGGCGCCCGGGTCTGCTGCAGCGCATCTGGTACCATGT
CTTCATTCTCCTCCTGGCAGAGGGAGCACATGGAGTAGACGAGCCGCTGCAGGGAAGGGAAAGTGAGCGCGTGSC
ACAGGGCTCGCTGCTGGAACCTGCCAGGGCATGCAGACGCACCGGGCTAGGTGTCCCTGCCCCGGGATCCTCCA
GCTGTCTGCTCGGCATACCTAAGGAAAAGCGTGTCTCGGTTACACAGCTTCACAGGCTGCCTCAGTCTTGAAATC
CTCGCTCCTGAAATCCTTGCCCTACAGAGGAGAACTTTTGCTCCAGGGTCCCAAGCCCATTAAAGTGTGAGAACT
AAGACCAAAACAGATGACTCCAGGTCTAAGCTGTGTGGACCTCCGAGTCCCTCAGCCACGCCTTCTCACCATCT
CACCCGAGCCACTGCAGGAAGGATCCAGCAGGACATAGTGACCTCACGATAGCGCGGATCTAAGGGGGAGACCG
CCAGGAAGTCTCCTCAGCCAGCTCACAGCAGGAGACGCCAACCCAGGCCAGCAGCGTGGCCATGGATGCCAGCC
GCCTGGCATCCAGGTCAAAGGCAAAGATCTTCTAGGGCAGAGGGCAGAGCAGGGGTGAGCTGAGCATGCACGGA
GCACTAAGGGCTGTGACAGCTGACACAGACAACAGAACATGCAGGTAAAGCAGGACACACAATATTGAAAC
GGCCTATATTTAAAGGGCCAGGGTCAGAGGTAAGTGGCTGGGGTCTCTGCCCCAAGGGCTAAGGGATCCACAT
CTCACACCTGCAGTGGGGAAGCTTAGCTTGGGGCAAATACCGTGAAGTACTTTGGTACAGCAGGAAAGAGTTAA
GCGAAAGTATCTCTTTCAGCCTTTATTACCCACTGAAAGGCACAAAATCAAACCCCATGTCTCCTCCTCCTCCT
CCTGTGGCACTCACCTTGGTTCTTCAGAAGAGCAGCCAAGTGACTGGTCTTATTGCCTGGGGCGGCACAGGCAT
CGATGACATGGGAGCCTGGCGGGGTCCAGCAGCATGGCTGGGAGACAGCTGGCCTGGCAGGCAGAGCACAGGGG
CCGGGTAAACAGAGACCCAGGCTAGGCCCTTCCCGTGCTACACATCTTCCCTTTTCTATTCTCTTGCTTAC
CCTGTCTGCAAGATGAGGTGTCCGGCCCGGTACAGTGGGTGTTTATGCAATCTGTCTGGGCGGGAAACACAG
CAGCTCCGGCATCAAGGAGTCCAGGAGAAAATGCTTCCCTTGAGGGCTTGTAAGTCATCAAGGCTGCCAGGGAA
GAACATTTCATTCTTCTGAATTTCTCCCTGCCAGGCCCTATTTCAACGGTCCATTTCATGCAACAAATGTTAC
CACAGCTATGGAGAAATCAACAGGGTGATAAGGGAATCCGGGATCCGCAGTTGAGGGAATGGGTGTGCAAGCCAG
ACTGATGGGTGAGGAGCCCCCTCTACTGTTTACCAGCAGTGGGAGCCTGGGCAAGTGATTCAATCTCAAGCCCCA
CTGGCATCTCTGTAAATAGTAGGTGTGAGGATTCAATGAGCCAATATATCCAAGATACTTACGTGCCACAATTT
AATAAATGTTAGCTATTCCTGTTGAAGCATAACCTTGGAGAAAGGTTACTTTACAGGGGGGTGAGGAGTGGGGAA
GTGAGAGCTGAGCTCATTCTTGATGGATGAGGAGTTAGTCATGTGAGGCGCTTAGGTTAAAACCTACATTCACTAT
AACTCAGTAAAGCAGTCCCGCCCACTCTCCGACCCATGCAGAAATAGGCCTAGAGAGTCACATGTCTCAGTTTACG
AAATCTATCGAAGTGGCAGAGCTGGAATTCAAACACAAGCAGCCGTTCTCTGCTATTCCACCCTGGTGTCCAAGC
AACATGGTAGGGCAGAAGGAAGAGGATCTTACAAAGAGTAAGGGAAAGGGAGAGGGGCAGAGGCTGCTTCTCAGA
GCCACCAAGGACAAAATAAGACAGGTGTGAGCCAGTGGAGGAGGCACGGGGCAGAGACCAGCCACTGTTGCTG
GCACGCTGGTGCACGTAGCACTGTGGCAGATGGACCTGGAGAGGAAGCAGGAGGGACAGCACAATGGAGCCAAGA
AAGGACTTAGCATGGCCGGGCGCGGTGGTTTATGCCTGTAATCCCAGCATTTTGGGAGGCCAAGGTGGGCAGATC
ACCTGAGGTGAGGAGTTTGGAGACCAGCCTGGCCAACATGGAGAAATCCCGTCTCTACTAAAAATACAAAATTAGC
CAGGCATGGTGTGCTGATGCCTGCAATCCTGTAGGGAAAAGAAAGAGAGATCAGACTGTTACTGTGTCTGTGTAGA
AAGGGAAGACATAAGAAATTCATTTTGACCTGTACCTTGAACAATTGGTTGGCTGAGATGCTGTTAATTTGTGA
CTTTGCCCAAATTTGAGCTCACAAAACATGTGTTGTATGGAATCAAGGTTTAAAGGATCTAGGGCTGTGCAGG
ACATGCCTTGTTAATAAAACGTTTACAAGC

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FIGURE 2300A

CAGCATCAATAAGGCCATTAATACGCAGGAAGTGGCTGTAAAGGAAAAACACGCCAGAACGTGCATACTGGGCAC
CCACCATGAGAAAGGGGCACAGACCTTCTGGTCTGTTGTCAACCGCCTGCCTCTGTCTAGCAACGCAGTGCTCTG
CTGGAAGTTCTGCCATGTGTTCCACAACTCCTCCGAGATGGACACCCGAACGTCTCTGAAGGACTCTCTGAGATA
CAGAAATGAATTGAGTGACATGAGCAGGATGTGGGGCCACCTGAGCGAGGGGTATGGCCAGCTGTGCAGCATCTA
CCTGAAACTGCTAAGAACCAAGATGGAGTACCACACCAAAAAATCCCAGGTTCCCAGGCAACCTGCAGATGAGTGA
CCGCCAGCTGGACGAGGCTGGAGAAAGTGACGTGAACAACTTTTTCCAGTTAACAGTGGAGATGTTTGACTACCT
GGAGTGTGAACCTCAACCTCTTCCAAACAGTATTCAACTCCCTGGACATGTCCCGCTCTGTGTCCGTGACGGCAGC
AGGGCAGTGCCGCCTCGCCCCGCTGATCCAGGTCATCTGGACTGCAGCCACCTTTATGACTACACTGTCAAGCT
TCTCTTCAAACCTCCACTCCTGCCTCCCAGCTGACACCTGCAAGGCCACCGGGACCGCTTCATGGAGCAGTTTAC
AAAGTTGAAAGATCTGTTCTACCGCTCCAGCAACCTGCAGTACTTCAAGCGGCTCATTGAGATCCCCCAGCTGCC
TGAGAACCCACCCAACCTTCCCTGCGAGCCTCAGCCCTGTGAGAACATATCAGCCCTGTGGTGGTGATCCCTGCAGA
GGCCTCATCCCCGACAGCGAGCCAGTCCTAGAGAAGGATGACCTCATGGACATGGATGCCTCTCAGCAGAATTT
ATTTGACAACAAGTTTGATGACATCTTTGGCAGTTTATTGAGCAGTGATCCCTTCAATTTCAACAGTCAAAATGG
TGTGAACAAGGATGAGAAGGACCACTTAATTGAGCGACTATACAGAGAGATCAGTGGATTGAAGGCACAGCTAGA
AAACATGAAGACTGAGAGCCAGCGGGTTGTGCTGCAGCTGAAGGGCCACGTCAGCGAGCTGGAAGCAGATCTGGC
CGAGCAGCAGCACCTGCGGCAGCAGGCGGCCGACGACTGTGAATTCCTGCGGCAGAACTGGACGAGCTCAGGAG
GCAGCGGGAGGACACCGAGAAGGCTCAGCGGAGCCTGTCTGAGATAGAAAAGGAAAGCTCAAGCCAATGAACAGCG
ATATAGCAAGCTAAAGGAGAAGTACAGCGAGCTGGTTCAGAACACGCTGACCTGCTGCGGAAGAATGCAGAGGT
GACCAAACAGGTGTCCATGGCCAGACAAGCCAGGTAGATTTGGAACGAGAGAAAAAGAGCTGGAGGATTTCGTT
GGAGCGCATCAGTGACCAGGGCCAGCGGAAGACTCAAGAACAGCTGGAAGTTCTAGAGAGCTTGAAGCAGGAAT
TGCCACAAGCCAACGGGAGCTTCAGGTTCTGCAAGGCAGCCTGGAAACTTCTGCCAGTCAGAAGCAAACCTGGGC
AGCCGAGTTCGCCGAGCTAGAGAAGGAGCGGGACAGCCTGGTGAGTGGCGCAGCTCATAGGGAGGAGGAATTATC
TGCTCTTCGGAAGAAGTGCAGGACACTCAGCTCAAACCTGGCCAGCACAGAGGAATCTATGTGCCAGCTTGCCAA
AGACCAACGAAAAATGCTTCTGGTGGGTCCAGGAAGGCTGCGGAGCAGGTGATACAAGACGCCCTGAACAGCT
TGAAGAACCTCCTCTCATCAGCTGCGCTGGGTCTGCAGATCACCTCCTCTCCACGGTCACATCCATTTCCAGCTG
CATCGAGCAACTGGAGAAAAGCTGGAGCCAGTATCTGGCCTGCCAGAAAGACATCAGTGGACTTCTCCATTCCAT
AACCCTGCTGGCCCACTTGACCAGCGACGCCATTGCTCATGGTGCCACCACCTGCCTCAGAGCCCCACCTGAGCC
TGCCGACTCACTGACCGAGGCTGTAGCAGATATGGCAGGGAACCCCTCGCCTACCTGGCCTCCCTGGAGGAAGA
GGGAAGCCTTGAGAATGCCGACAGCACAGCATTGAGGAAGTGCCTGAGCAAGATCAAGGCCATCGGCGAGGAGCT
CCTGCCCAGGGGACTGGACATCAAGCAGGAGGAGCTGGGGGACCTGGTGACAAAGGAGATGGCGGCCACTTCAGC
TGCTATTGAAACTGCCACGGCCAGAATAGAGGAGATGCTCAGCAATCCCGAGCAGGAGACACAGGAGTCAAATT
GGAGGTGAATGAAAGGATCCTTGGTTGCTGTACAGCCTCATGCAAGCTATTGAGGTGCTCATCGTGGCCTCTAA
GGACCTCCAGAGAGAGATTGTGGAGAGCGGCAGGGGTACAGCATCCCCATAAGAGTTTTATGCCAAGAAGCTCTCG
ATGGACAGAAGGACTTATCTCAGCCTCCAAGGCTGTGGGCTGGGGAGCCACTGTGATGGTGGATGCAGCTGATCT
GGTGGTACAAGGCAGAGGGAATTTGAGGAGCTAATGGTGTGTTCTCATGAAATTGCTGCTAGCACAGCCAGCT
TGTGGCTGCATCCAAGGTGAAAGCTGATAAGGACAGCCCCAACCTAGCCAGCTGCAGCAGGCCTCTCGGGGAGT
GAACCAGGCCACTGCCGGCGTTGTGGCCTCAACCATTTCCGGCAAAATCACAGATCGAAGAGACAGACAACATGGA
CTTCTCAAGCATGACGCTGACACAGATCAAACGCCAAGAGATGGATTCTCAGGTTAGGGTGCTAGAGCTAGAAAA
TGAATTGCAGAAGGAGCGTCAAAAACCTGGGAGAGCTTCGGAAGGAGCACTACGAGCTTGCTGGTGTGCTGAGGG
CTGGGAAGAAGGAACAGAGGCATCTCCACCTACACTGCAAGAAGTGGTAACCGAAAAAGAAATAGAGCCAAACCAA
CACCCCATATGTGAGTGTAAATCCTTGTTACCTATCTCGTGTGTGTTATTTCCCCAGCCACAGGCCAAATCCTTG
GAGTCCCAGGGGCAGCCACACCCTGCCATTACCCAGTGCCGAGGACATGCATGACACTTCCAAAGACTCCCTCC
ATAGCGACACCCCTTTCTGTTTGGACCCATGGTATCTCTGTTCTTTTCCCGCCTCCCTAGTTAGCATCCAGGCTG
GCCAGTGCTGCCATGAGCAAGCCTAGGTACGAAGAGGGGTGGTGGGGGGCAGGGCCACTCAACAGAGAGGACCA
ACATCCAGTCTGCTGACTATTTGACCCCCACAACAATGGGTATCCTTAATAGAGGAGCTGCTTGTGTTTGTG
ACAGCTTGGAAAGGGAAGATCTTATGCCTTTTCTTTTCTGTTTCTTCTCAGTCTTTTCAAGTTTCATCATTTGCA
CAAACCTTGTGAGCATCAGAGGGCTGATGGATTCAAACCAGGACACTACCCTGAGATCTGCACAGTCAAGGAC
GGCAGGAGTGTCTGGCTGTGAATGCCAAAGCCATTCTCCCCCTCTTTGGGCAGTGCCATGGATTCCACTGCTT

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FIGURE 2300B

CTTATGGTGGTTGGTTGGGTTTTTTGGTTTTGTTTTTTTTTTTAAAGTTTCACTCACATAGCCAACCTCTCCCAAAG
GGCACACCCCTGGGGCTGAGTCTCCAGGGCCCCCAACTGTGGTAGCTCCAGCGATGGTGCTGCCCAGGCCTCTC
GGTGCTCCATCTCCGCCTCCACACTGACCAAGTGCTGGCCACCCAGTCCATGCTCCAGGGTCAGGCGGAGCTGC
TGAGTGACAGCTTTCTCAAAAAGCAGAAGGAGAGTGAGTGCCTTTCCCTCCTAAAGCTGAATCCCGGCGGAAAG
CCTCTGTCCGCCTTTACAAGGGAGAAGACAACAGAAAAGAGGGACAAGAGGGTTACACAGCCCAGTTCCCGTGAC
GAGGCTCAAAAACCTTGATCACATGCTTGAATGGAGCTGGTGAGATCAACAACACTACTTCCCTGCCGGAATGAAC
TGTCCGTGAATGGTCTCTGTCAAGCGGGCCGCTCTCCCTTGGCCCAGAGACGGAGTGTGGGAGTGATTCCCAACTC
CTTTCTGCAGACGCTCTGCCTTGGCATCCTCTTGAATAGGAAGATCGTTCCACCTTCTACGCAATTGACAAACCCG
GAAGATCAGATGCAATTGCTCCCATCAGGGAAGAACCCTATACTTGGTTTTGCTACCCCTTAGTATTTATTACTAAC
CTCCCTTAAGCAGCAACAGCCTACAAAGAGATGCTTGGAGCAATCAGAACTTCAGGTGTGACTCTAGCAAGGCTC
ATCTTTCTGCCCGGCTACATCAGCCTTCAAGAATCAGAAGAAAGGCCAAGGTGCTGGACTGTTACTGACTTGGAT
CCCAAAGCAAGGAGATCATTGGAGCTCTTGGGTGAGAGAAAATGAGAAAGGACAGAGCCAGCGGCTCCAACTCC
TTTCAGCCACATGCCCCAGGCTCTCGCTGCCCTGTGGACAGGATGAGGACAGAGGGCACATGAACAGCTTGCCAG
GGATGGGCAGCCCAACAGCACTTTTCTCTTCTAGATGGACCCCAGCATTTAAGTGACCTTCTGATCTTGAAAA
ACAGCGTCTTCTTCTTTATCTATAGCAACTCATTGGTGGTAGCCATCAAGCACTTCCCAGGATCTGCTCCAACA
GAATATTGCTAGGTTTTGCTACATGACGGGTGTGTGAGACTTCTGTTTGATCACTGTGAACCAACCCCCATCTCCC
TAGCCCAACCCCTCCCAACTCCCTCTCTGTGCATTTTCTAAGTGGGACATTCAAAAACTCTCTCCAGGACC
TCGGATGACCATACTCAGACGTGTGACCTCCATACTGGGCTAAGGAAGTATCAGCACTAGAAATTGGGCAGTCTT
AATGTTGAATGCTGCTTTCTGCTTAGTATTTTTTTGATTCAAGGCTCAGAAGGAATGGTGCGTGGCTTCCCTGTC
CCAGTTGTGGCAACTAAACCAATCGGTGTGTCTTGATGCGGGTCAACATTTCCAAAAGTGGCTAGTCTCTCACTT
CTAGATCTCAGCCATTCTAACTCATATGTTCCCAATTACCAAGGGGTGGCCGGGCACAGTGGCTCACGCCTGTAA
TCCCAGCACTTTGAGAGGCTGAGGTGGTAGGATCACCTGAGGTGAGGAGTTCAAGACCAGCCTGTCCAACATGGT
GAAACCCCCATCTCTACTAAAAATACAAAAATTAGCCGAGCGTAGTGACGGGTGCCGTAAATCCCAGCTACTCA
GGAGGCTGAGACAGGAGAATCACCTGAACCCCAGAGGCAGAGGTTGCAGTGAGCTGAGATCACGCCATTGTACTC
CAGCCTGGGCAACAAGAGCAAACTCCGTCTCAAAAAAAAAAAAAAAAAAATTACAAATGGGGCAACACAGTCTAGTGTA
ATGGATCAAAATTAAGATTCTCTGCCAGCCGGGCACAGTGGCGCATGCCTGTAATCCAGAACCTTTGGGAGGCCA
AGACGGGATGATTGCTTGAGCTCAGGAGTTTGAGACCAGGCTGGGCATCATAGCAAGACCTCATCTCTACTAAAA
TTCAAAAACAAAATTAGCCGGGCATGATGGTGCATGCCTGTAGTCTCAGCTAGTTGGGGAGCTAAGGTGGGAGAA
TTGCTTGAGCTTGGAAGTCGAGGCTGCAGTCAGCCCTGATTGTGCCAGTGCACCTCCGGCCTGGGTGACAGAGTG
AGACCTGTCTCAAAAAAAAAAAGATTCTGTGTGAGAGCCAGCCAGCCAGGAGTTTGAGGCTGCAATGAGCCATGAT
TTCCCACTGCACTCCAGCCTGAGTGACAGAGCGAGACTCCATCTCTTTAAAAACAAACAAAAAATTATCTGAATG
ATCCTGTCTCTAAAAAGAAGCCACAGAAATGTTTAAAAACTTCATCGACTTAGCCTGAGTCATAACGGTTAAGAA
AGCACTTAAACAGAAGCAGAGGCTAATTCAGTGTACATGAGGAAGTAGCTGTGAGATGTACATAATTACTTTC
GTAATAGCTCAGATTAGAATGGCTACCCCACTCTCTAGACAAAATCAAATTGTCTATTGTGACTCTTCTAAAAA
TGAAGATGAAGAGCTATTTAATGACACACCTTGGATTAAACGGGAATCACATCTTAAAGCTAAAAATGAACCTG
CAAGCCTTCTAAATGAGTCACTGAGCATCACTAGTGACAAGTCTCGGGTGAGCGTAAATGGGTGATGACAAGATG
GGACAGCAACAAAAATCATGGCTTAGGATCGACAAGAAGTTAAAAAACAGCTGCATCTGTTACTTAAAGTTTGTAAAG
ACAGTGCCCTGAGACCTCTAGAGAAAAAGATGTTTGTTTACATAAGAGAAAGAGGCCAGACATGGTGTCTCACACG
TTTAATCCAGCACTTTGGGAGGCAGGGGCGGGTGGATCACCTGAGGTGAGGAGTTCAAGACTAGCCTGGCCAAC
ATGGTGAAACCCGCTCTCTACTAAAAATACAAAAATTAGCCGGGCATGGTGGCAGGCGCCTATAATCCAGCTAC
TGGGGAGGCTGAGGCAGGAGAATC

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FIGURE 2301

ATGGGGCGGGGCTCTGGGAGGCGTGGCCTCCGGCCGGCTCCTCTGCTGTTGCCAAGGGAAACTGCCGCGAGGAG
GCGGAAGGAGCAGAGGACCGGCAGCCGGCGTCGAGGCGGGGCGCGGGAACGACGGCGGGCCATGGCGGCCTCGGGG
CCCGGGTGTGCGAGCTGGTGCTTGTGTCCCGAGGTGCCATCCGCCACCTTCTTCACTGCGCTGCTCTCGCTGCTG
GTTTCCGGGCTCGCCTGTTCTGTGCTGCAGCAGCCCCCTGGCGCCCTCGGGCCTCACGCTGAAGTCCGAGGCCCTT
CGCAACTGGCAAGTTTACAGGCTGGTAACCTACATCTTTGTCTACGAGAATCCCATCTCCCTGCTCTGCGGCGCT
ATCATCATCTGGCGCTTTGCTGGCAATTTGAGAGAACCGTGGGACCCGTCCGCCACTGCTTCTTACCGTGATC
TTCGCCATCTTCTCCGCTATCATCTTCTGTTCATTGAGAGGCTGTGTCACTACTGTCAAAGCTGGGGGAAGTGGAG
GATGCCAGAGGTTTACCCCCAGTGGCCTTTGCCATGCTGGGAGTCAACACCGTCCGTTCTCGGATGAGGCGGGCC
CTGGTGTGTTGGCATGGTTGTGCCCCAGTCCCTGGTTCCGTGGCTCCTGCTGGGTGCCTCGTGGCTCATTCCCCAG
ACCTCTTTCTCAGTAATGTCTGCGGGCTGTCCATCGGGCTGGCCTATGGCCTCACCTACTGCTATTCCATCGAC
CTCTCAGAGCGAGTGGCACTGAAGCTCGATCAGACCTTCCCCCTTCAGCCTGATGAGGAGGATATCCGTGTTCAAG
TACGTCTCAGGGTCTTCAGCCGAGAGGAGGGCAGCCCAGAGCCGGAAACTGAACCCGGTGCCTGGCTCCTACCCC
ACACAGAGCTGCCACCTCACCTGTCCCCAAGCCACCCTGTGTCCCAGACGCAGCACGCCAGTGGTCAGAAGCTG
GCCTCCTGGCCCTCCTGCACCCCCGGGCACATGCCACCTTGCCCTCCGTACCAGCCTGCCTCCGGCCTGTGCTAT
GTGCAGAACCCTTTGGTCCAAACCCACCTCCTCCAGTGTCTACCCAGCTTCTGCGGGCACCTCCCTGGGCATC
CAGCCCCCACGCCTGTGAACAGCCCTGGCACGGTGTATTCTGGGGCCTTGGGCACACCAGGGGCTGCAGGCTCC
AAGGAGTCTCCAGGGTCCCCATGCCCTGAGAGAATTTCTAGGGAAGTCATCTCACTTGGCCTTCTGAAGGTCTCT
CCCTAAGAGTCTCCTGACAAAAGTTACTTATTGA

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FIGURE 2302

GTTTCATGATCAACATGGGAGACTCCCACGTGGACACCAGCTCCACCGTGTCCGAGGCGGTGGCCGAAGAAGTAT
CTCTTTTCAGCATGACGGACATGATTCTGTTTTCGCTCATCGTGGGTCTCCTAACCTACTGGTTCTCTTCAGAA
AGAAAAAAGAAGAAGTCCCCGAGTTCACCAAAATTCAGACATTGACCTCCTCTGTCTAGAGAGAGCAGCTTTGTGG
AAAAGATGAAGAAAACGGGGAGGAACATCATCGTGTTCTACGGCTCCCAGACGGGGACTGCAGAGGAGTTTGCCA
ACCGCCTGTCCAAGGACGCCACCGCTACGGGATGCGAGGCATGTCTAGCGGACCCCTGAGGAGTATGACCTGGCCG
ACCTGAGCAGCCTGCCAGAGATCGACAACGCCCTGGTGGTTTTCTGCATGGCCACCTACGGTGAGGGAGACCCCA
CCGACAATGCCCAGGACTTCTACGACTGGCTGCAGGAGACAGACGTGGATCTCTCTGGGGTCAAGTTTCGGGTGT
TTGGTCTTGGGAACAAGACCTACGAGCACTTCAATGCCATGGGCAAGTACGTGGACAAGCGGCTGGAGCAGCTCG
GCGCCAGCGCATCTTTGAGCTGGGGTTGGGCGACGACGATGGGAACTTGGAGGAGGACTTCATCACCTGGCGAG
AGCAGTTCTGGCCGGCCGTGTGTGAACACTTTGGGGTGGAAGCCACTGGCGAGGAGTCCAGCATTGCCAGTACG
AGCTTGTGGTCCACACCGACATAGATGCGGCCAAGGTGTACATGGGGGAGATGGGCCGGCTGAAGAGCTACGAGA
ACCAGAAGCCCCCTTTGATGCCAAGAATCCGTTCTTGCTGCAGTCAACCAACCGGAAGCTGAACCAGGGAA
CCGAGCGCCACCTCATGCACCTGGAATTGGACATCTCGGACTCCAAAATCAGGTATGAATCTGGGGACCACTGG
CTGTGTACCCAGCCAACGACTCTGCTCTCGTCAACCAGCTGGGCAAAATCCTGGGTGCCGACCTGGACGTCTGTA
TGTCCTTGAACAACCTGGATGAGGAGTCCAACAAGAAGCACCCATTCCCGTGCCCTACGTCTACCGCACGGCCC
TCACCTACTACCTGGACATCACCAACCCGCCGCGTACCAACGTGCTGTACGAGCTGGCGCAGTACGCCTCGGAGC
CCTCGGAGCAGGAGCTGCTGCGCAAGATGGCCTCCTCCTCCGGCGAGGGCAAGGAGCTGTACCTGAGCTGGGTGG
TGGAGGCCCGGAGGCACATCCTGGCCATCCTGCAGGACTGCCCGTCCCTGCGGCCCCCCATCGACCACTGTGTG
AGCTGCTGCCGCGCCTGCAGGCCCGCTACTACTCCATCGCCTCATCCTCCAAGGTCCACCCCAACTCTGTGCACA
TCTGTGCGGTGGTTGTGGAGTACGAGACCAAGGCTGGCCGCATCAACAAGGGCGTGGCCACCAACTGGCTGCGGG
CCAAGGAGCCTGCCGGGGAGAACGGCGGCCGTGCGTGGTGCCCATGTTCTGCGCAAGTCCCAGTTCCGCTGC
CCTTCAAGGCCACCAACGCCTGTCTCATGTTGGGCCCCGGCACCGGGGTGGCACCCCTTCATAGGCTTCATCCAGG
AGCGGGCCTGGCTGCGACAGCAGGGCAAGGAGGTGGGGGAGACGCTGCTGTACTACGGCTGCCGCCGCTCGGATG
AGGACTACCTGTACCGGGAGGAGCTGGCGCAGTTCCACAGGGACGGTGCGCTACCCAGCTCAACGTGGCCTTCT
CCCGGGAGCAGTCCCACAAGGTCTACGTCCAGCACCTGCTAAAGCAAGACCGAGAGCACCTGTGGAAGTTGATCG
AAGGCGGTGCCACATCTACGTCTGTGGGGATGCACGGAACATGGCCAGGGATGTGCAGAACACCTTCTACGACA
TCGTGGCTGAGCTCGGGGCCATGGAGCACGCGCAGGCGGTGGACTACATCAAGAACTGATGACCAAGGGCCGCT
ACTCCCTGGACGTGTGGAGCTAGGGGCTGCCGTGCCCCACCCACCCACAGACTCCGGCCTGTAATCAGCTCTCC
TGGCTCCCTCCCGTAGTCTCCTGGGTGTGTTTGGCTTGGCCTTGGCATGGGCGCAGGCCCACTGACAAAGACTCC
TCTGGGCCCTGGGGTGCATCCTCCTCAGCCCCAGGCCAGGTGAGGTCCACCGGCCCTGGCAGCACAGCCAGGG
CCTGCATGGGGGCACCGGGCTCCATGCCTCTGGAGGCCTCTGGCCCTCGGTGGCTGCACAGAAGGGCTCTTTCTC
TCTGCTGAGCTGGGCCAGCCCTCCACGTGATTTCCAGTGAGTGTAATAATTTTAAATAACCTCTGGCCCTTG
GAATAAAGTTCTGTTTTCTGT

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FIGURE 2303

MTDMILFSLIVGLLTYWFLFRKKKEEVPEFTKIQTLTSSVRESSFVEKMKKTGRNIIVFYGSQTGTAEEFANRLS
KDAHRYGMRGMSADPEEYDLADLSSLPEIDNALVVFCMATYGECDPTDNAQDFYDWLQETDVDLSGVKFVAVFGLG
NKTYEHFNAMGKYVDKRLEQLGAQRIFELGLGDDDGNNLEEDFITWREQFWPAVCEHFGVEATGEESSIRQYELVV
HTDIDAAKVYMGEMGRLKSYENQKPPFDAKNPFLAAVTTNRKLNQGTERHLMHLELDISDSKIRYESGDHVAVYP
ANDSALVNQLGKILGADLDVMSLNNLDEESNKKHFFCPTSYRTALTYLDITNPPRTNVLYELAQYASEPSEQ
ELLRKMASSSGEGKELYLSWVVEARRHILAILQDCPSLRPPIDHLCCELLPRLQARYYSIASSSKVHPNSVHICAV
VVEYETKAGRINKGVATNWLRAKEPAGENGGRALVPMFVRKSQFRLPFFKATTPVIMVGP GTGVAPFIGFIQERAW
LRQQGKEVGETLLYYGCRRSDEDYLYREELAQFHRDGALTQLNVAFSREQSHKVYVQHLLKQDREHLWKLI EGGA
HIYVCGDARNMARDVQNTFYDIVAELGAMEHAQAVDYIKKLMTKGRYSLDVWS

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FIGURE 2304

GAGGAGCCTCGGGTGGGCCGGGGTTGCTGCGCCGTCCTCCACTACTGGCTACTGGCGCTGCAGCCATGCAGCCCC
CGCCCCCGGGCCCGCTGGGCGACTGCCTGCGGGACTGGGAGGATCTACAGCAGGACTTCCAGAACATCCAGGAGA
CCCATCGGCTCTACCGCCTGAAGCTGGAGGAGCTGACCAAACCTTCAGAACAAATTGCACCAGCTCCATCACGCGGC
AGAAGAAGCGGCTCCAGGAGCTGGCCCTCGCCCTGAAGAAATGCAAACCTCCCTCCCAGCAGAGGCCGAGGGGG
CCGCACAGGAGCTGGAGAACCAGATGAAAGAGCGCCAAGGCCTCTTCTTTGACATGGAGGCCTATTTGCCTAAGA
AGAATGGATTGTACCTGAGCCTGGTTCTGGGGAACGTCAACGTACAGCTCCTGAGCAAGCAGGCTAAGTTTGCT
ACAAGGACGAGTATGAGAAGTTCAAGCTCTACCTACCATCATCCTCATCCTCATCTCCTTCACTTGCCGCTTCC
TGCTCAACTCCAGGGTGACAGATGCTGCCTTCAACTTCCTGCTGGTCTGGTACTACTGCACCCTGACCATCCGGG
AGAGCATCCTCATCAACAACGGCTCCCGGATCAAAGGCTGGTGGGTGTTCCATCACTACGTGTCCACCTTCCTGT
CGGGAGTCATGCTGACGTGGCCCCGACGGTCTCATGTACCAGAAATTCCGGAACCAATTCCTCTCCTTTTCCATGT
ACCAGAGCTTCGTGCAGTTTCTCCAGTACTACTACCAGAGCGGCTGCCTCTACCGCCTGCGGGCGCTGGGCGAGC
GGCACACCATGGACCTCACTGTGGAGGGCTTCCAGTCTTGATGTGGCGGGGCTCACCTTCCTGCTGCCTTTTC
TTTTCTTTGGACACTTCTGGCAGCTTTTAAACGCGCTGACGTTGTTCAACCTGGCCCAGGACCTCAGTGCAAGG
AGTGGCAGGTGCTTATGTGCGGCTTTCCTTCCTCCTTTTTCCTCGGCAATTTCTTACCACCTGAGGGTTG
TGCACCACAAGTTTACAGTCAGCGGCACGGGAGCAAGAAGGATTGAGGCTGGGCCTTCCCCTGCCGGCCCAGAG
GGGCTTCTGTCTGTGTGTTGTGGGAGGGGATGGGAGGCGCCCTCGAGTGTGCGTGTATCAGGGGGTCTCTTCT
ATTCTCCCTTGGGTTTTATGGGCGCTGTGGGCCCTGAAGGAAGACCTGGGCCAGTGCCCTCAATAAAGAGAGGC
CCAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2305

MQPPPPGPLGDCLRDWEDLQQDFQNIQETHRLYRLKLEELTKLQNNCTSSITRQKKRLQELALALKKCKPSLP
AEGAAQELQENQMKERQGLFFDMEAYLPKKNGLYLSVLGNVNVTLSSKQAKFAYKDEYEKFKLYLTIILILISFT
CRFLLNSRVTDAAFNFLVWYYCTLTIRE SILINNGSRIKGWWVFHHYVSTFLSGVMLTWPDGLMYQKFRNQFLS
FSMYQSFVQFLQYYYQSGCLYRLRALGERHTMDLTVEGFQSWMWRLTFLLPFLFFGHFWQLFNALTLENLAQDP
QCKEWQVLMCGFPFLLLFLGNFFTTLRVVHKKFHSQRHGSKKD

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FIGURE 2306

GGCGCTGGGCAGTGTGGAGGTCGTTGGAGTCACTTCCGCGTCACCAGCTCCTGTGCCTGCCAGTCGGTGCCCCCTC
CCGCTCCAGCCATGCTCTCCGCCCTCGCCCGCCTGCCAGCGCTGCTCTCCGCCGAGCTTCAGCACCTCGGCCC
AGAACAATGCTAAAGTAGCTGTGCTAGGGGCCCTCTGGAGGCATCGGGCAGCCACTTTCACTTCTCCTGAAGAACA
GCCCCTTGGTGAGCCGCCTGACCCCTCTATGATATCGCGCACACACCCGGAGTGGCCGAGATCTGAGCCACATCG
AGACCAAAGCCGCTGTGAAAGGCTACCTCGGACCTGAACAGCTGCCTGACTGCCTGAAAGGTTGTGATGTGGTAG
TTATTCCGGCTGGAGTCCCCAGAAAGCCAGGCATGACCCGGGACGACCTGTTCAACACCAATGCCACGATTGTGG
CCACCCTGACCGCTGCCTGTGCCAGCACTGCCCGGAAGCCATGATCTGCGTCATTGCAATCCGGTTAATTCCA
CCATCCCCATCACAGCAGAAGTTTTCAAGAAGCATGGAGTGTACAACCCCAACAAAATCTTCGGCGTGACGACCC
TGGACATCGTCAGAGCCAACACCTTTGTTGCAGAGCTGAAGGGTTTGGATCCAGCTCGAGTCAACGTCCCTGTCA
TTGGTGGCCATGCTGGGAAGACCATCATCCCCCTGATCTCTCAGTGCACCCCAAGGTGGACTTTCCCCAGGACC
AGCTGACAGCACTCACTGGGCGGATCCAGGAGGCCGGCACGGAGGTGGTCAAGGCTAAAGCCGGAGCAGGCTCTG
CCACCCTCTCCATGGCGTATGCCGGCGCCCGCTTTGTCTTCTCCCTTGTGGATGCAATGAATGGAAGGAAGGTG
TTGTGGAATGTTTCCTTCGTTAAGTCACAGGAAACGGAATGTACCTACTTCTCCACACCGCTGCTGCTTGGGAAAA
AGGGCATCGAGAAGAACCTGGGCATCGGCAAAGTCTCCTCTTTTGAGGAGAAGATGATCTCGGATGCCATCCCCG
AGCTGAAGGCCTCCATCAAGAAGGGGGAAGATTTCTGTAAGACCTGAAGTGAAGCCGCTGTGACGGGTGGCCAGT
TTCCTTAATTTATGAAGGCATCATGTCACTGCAAAGCCGTTGCAGATAAACTTTGTATTTAATTTGCTTTGGTG
ATGATTACTGTATTGACATCATATGCCTTCCAAATTGTGGGTGGCTCTGTGGGCGCATCAATAAAAGCCGTCCT
TGATTTTATTTTCAAGGTCCCTTCTGTAAAAA

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FIGURE 2307

MLSALARPASAALRRSFSTSAQNNAKVAVLGASGGIGQPLSLLLKNSPLVSRLTLYDIAHTPGVAADLSHIETKA
AVKGYLGPEQLPDCLKGCDVVVIPAGVPRKPGMTRDDLFNTINATIVATLTAACAQHCPEAMICVIANPVNSTIPI
TAEVFKKHGVNPNKIFGVTTLDIVRANTFVAELKGLDFARVNVVPVIGGHAGKTIIP LISQCTPKVDFFPDQLTA
LTGRIQEAGTEVVKAKAGAGSATLSMAYAGARFVFSLVDAMNGKEGVVECSFVKSQETECTYFSTPLLLGKKGIE
KNLGIGKVSSFEEKMISDAIPELKASIKKGEDEVKTLK

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FIGURE 2308

CTCAAACACCGCCTGCTAAAAATACCCGACTGGAGGAGCATAAAAGCGCAGCCGAGCCCAGCGCCCCGCACTTTT
CTGAGCAGACGTCCAGAGCAGAGTCAGCCAGCATGACCGAGCGCCGCGTCCCCCTTCTCGCTCCTGCGGGGCCCCA
GCTGGGACCCCTTCCGCGACTGGTACCCGCATAGCCGCTCTTCGACCAGGCCTTCGGGCTGCCCCGGCTGCCGG
AGGAGTGGTTCGCAGTGGTTAGGCGGCAGCAGCTGGCCAGGCTACGTGCGCCCCCTGCCCCCGCCGCCATCGAGA
GCCCCGCAGTGGCCGCGCCCGCTACAGCCGCGCGCTCAGCCGGCAACTCAGCAGCGGGGTCTCGGAGATCCGGC
ACACTGCGGACCGCTGGCGCGTGTCCCTGGATGTCAACCACTTCGCCCCGGACGAGCTGACGGTCAAGACCAAGG
ATGGCGTGGTGGAGATCACCGCAAGCACGAGGAGCGGCAGGACGAGCATGGCTACATCTCCCGGTGCTTCACGC
GGAAATACACGCTGCCCCCGGTGTGGACCCACCCAAGTTTCCTCCTCCCTGTCCCCTGAGGGCACACTGACCG
TGGAGGCCCCCATGCCCAAGCTAGCCACGCAGTCCAACGAGATCACCATCCCAGTCACCTTCGAGTCGCGGGGCC
AGCTTGGGGGCCCAGAAGCTGCAAAATCCGATGAGACTGCCGCCAAGTAAAGCCTTAGCCTGGATGCCCCCCCT
GCTGCCGCCACTGGCTGTGCCTCCCCCGCCACCTGTGTGTTCTTTTGATACATTATCTTCTGTTTTTCTCAAAT
AAAGTTCAAAGCAACCACCTGTAAAAAAAAAAAAAAAAAAAA

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FIGURE 2309

MTERRVPFSLLRGPSWDPPFRDWYPHSRLFDQAFGLPRLPEEWSQWLGGSSWPGYVRPLPPAAIESPAVAAPAYSR
ALSRQLSSGVSEIRHTADRWRVSLDVNHFAPDELTVKTKDGVVEITGKHEERQDEHGYISRCFTRKYTLPPGVDP
TQVSSSLSPEGTLTVEAPMPKLATQSNEITIPVTFESRAQLGGPEAAKSDETAAK

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FIGURE 2310

ATAAAAGCGCAGCCGAGCCCAGCGCCCCGCACTTTTCTGAGCAGACGTCCAGAGCAGAGTCAGCCAGCATGACCG
AGCGCCGCGTCCCCCTTCTCGCTCCTGCGGGGGCCCCAGCTGGGACCCCTTCCGCGACTGGTACCCGCATAGCCGCC
TCTTCGACCAGGCCTTCGGGCTGCCCCGGCTGCCGGAGGAGTGGTCGCAGTGGTTAGGCGGCAGCAGCTGGCCAG
GCTACGTGCGCCCCCTGCCCCCGCCGCCATCGAGAGCCCCGCACTGGCCGCGCCCGCTACAGCCGCGCGCTCA
GCCGGCAACTCAGCAGCGGGGTCTCGGAGATCCGGCACACTGCGGACCGCTGGCGCGTGTCCCTGGATGTCAACC
ACTTCGCCCCGGACGAGCTGACGGTCAAGACCAAGGATGGCGTGGTGGAGATCACCGGTGAGCCCCCTGCTCCT
GCAGGGGAGAGGAGGAGGCTAGCAGGGCGGGCAGGGCCGGGGGCGTGCGGTTGAAACGGGGGTCCCGGGGGCCTG
GGGAGTTAAACGTTGGCCCAGCACCGGGAAAAACAGGACTCCTGATTCCCTTGCTCAGGAATTGGGAGTGCGGGT
CGCTTCTAAGGGCGCTTTCTGCTCTGTAATCCCAGCGCTTTGGGAGGCCGAGACGGGAGGATCGCTTGAGGCCAG
GAGTTCAAGACTAGCCTGGGCAACATAGCGAGACGCGCCCCCCCCGCCCCGACCCCGCGCCATTAC

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FIGURE 2311

CAGAGTCAGCCAGCATGACCGAGCGCCGCGTCCCCCTTCTCGCTCCTGCGGGGGCCCCAGCTGGGACCCCTTCCGCG
ACTGGTACCCGCATAGCCGCTCTTCGACCAGGCCTTCGGGCTGCCCCGGCTGCCGGAGGAGTGGTCGCAGTGGT
TAGGCGGCAGCAGCTGGCCAGGCTACGTGCGCCCCCTGCCCCCGCCGCCATCGAGAGCCCCGAGTGGCCGCGC
CCGCCTACAGCCGCGCGCTCAGCCGGCAACTCAGCAGCGGGGTCTCGGAGATCCGGCACACTGCGGACCGCTGGC
GCGTGTCCCTGGATGTCAACCACTTCGCCCCGGACGAGCTGACGGTCAAGACCAAGCTAGCCACGCAGTCCAACG
AGATCACCATCCCAGTCACCTTCGAGTCGCGGGCCCAGCTTGGGGGGCCAGAAGCTGCAAAATCCGATGAGACTG
CCGCCAAGTAAAGCCTTAGCCCGGATGCCCAACCCTGCTGCCGCCACTGGCTGTGCCTCCCCCGCCACCTGTGTG
TTCITTTGATACATTTATCTTCTGTTTTTCTCAAATAAAGTTCAAAGCAACC

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FIGURE 2312A

GGACTGCGAAAGGAGCAGGGTTGCGGAGCTAGGGCTCCAGCCTGCGGCCGCGCATTCTTGCGTCTGGCCAGCCGC
GAGCTCTAAGGGTCGGCCCCGCCCCGTCCGCCCCGCGGCTCCCTGCCAGGCTCTCGCGGGCGCGCTCGGGGTGG
GGCCTCGCGGCTGGCGGAGATGCGGCCGGGGCTGCGCGGTGGTGATGCGAGCCTGCAGGGCGGCGCGCCGGGGCA
GCCGGAGCCGCGCGCCGCGGCGCTGTAATCGGACACCAAGAGCGCTCGCCCCGGCCTCCGGCCACTTTCCATTTC
ACTCCGAGGTGCTTGATTGAGCGACGCGGAGAAGAGCTCCGGGTGCCGCGGCACTGCAGCGCTGAGATTCTTTTA
CAAAGAACTCAGAGGACCGGGAAGAAAGAAATTTACCTTTGCGACGTGCTAGAAAATAAGGTGCTCTGGGAAAA
GGACTGGAGACACAAGCGCATCCAACCCCGGTAGCAAACTGATGACTTTTCCGTGCTGATTTCTTTCAACCTCGG
TATTTTCCCTTGATATTAACCTTGCAATCTGAAGAAATGGCATTCCGGACAATTTGCGTGTTGGTTGGAGTATT
TATTTGTTCTATCTGTGTGAAAGGATCTTCCAGCCCCAAGCAAGAGTTTATTTAACATTTGATGAACCTTCGAGA
AACCAAGACCTCTGAATACTTCAGCCTTTCCACCATCCTTTAGACTACAGGATTTTATTAATGGATGAAGATCA
GGACCGGATATATGTGGGAAGCAAAGATCACATTCTTTCCCTGAATATTAACAATATAAGTCAAGAAGCTTTGAG
TGTTTTCTGGCCAGCATCTACAATCAAAGTTGAAGAATGCAAAATGGCTGGCAAAGATCCACACACGGCTGTGG
GAACTTTGTCCGTGTAATTCAGACTTTCATCGCACACATTTGTATGTCTGTGGGAGTGGCGCTTTCAGTCTGT
CTGTACTTACTTGAACAGAGGGAGGAGATCAGAGGACCAAGTTTTCATGATTGACTCCAAGTGTGAATCTGGAAA
AGGACGCTGCTCTTTCAACCCCAACGTGAACACGGTGTCTGTTATGATCAATGAGGAGCTTTTCTCTGGAATGTA
TATAGATTTTATGAGGACAGATGCTGCTATTTTTCGAAGTTTAAACCAAGAGGAATGCGGTGAGAACTGATCAACA
TAATTCAAAATGGCTAAGTGAACCTATGTTTGTAGATGCACATGTCATCCAGATGGTACTGATCCAAATGATGC
TAAGGTGTACTTCTTCTTCAAAGAAAACTGACTGACAATAACAGGAGCACGAAACAGATTCAATCCATGATTGC
TCGAATATGCTTAATGACACTGGTGGACTGCGTAGCCTTGTCAACAAGTGGACCACTTTCTTAAAGGCGAGGCT
GGTGCTCGGTAACAGATGAAGACGGCCAGAAACACACTTTGATGAATTAGAGGATGTGTTTCTGCTGGAAC
TGATAACCCGAGGACAACACTAGTGTATGGCATTTTACAACATCAAGCTCAGTTTTCAAAGGATCAGCCGTGTG
TGTGTATCATTTATCTGATATACAGACTGTGTTTAAATGGGCTTTTGCCACAAAGAAGGGCCCAATCATCAGCT
GATTTCTATCAGGGCAGAAATCCATATCCTCGCCCTGGAACCTGTCCAGGAGGAGCATTTACACCCAAATGCG
AACCACCAAGGAGTTCCAGATGATGTTGTCATTTTATTCGGAACCATCCTCTCATGTACAATTCATCTACCC
AATCCACAAAAGGCTTTGATTGTTGCTATTGGCACTGACTACAAGTATACAAAGATAGCTGTGGATCGAGTGAA
CGCTGCTGATGGGAGATACCATGCTCTGTTTCTCGAACAGATCGGGGTACTGTGCAAAAAGTGGTTGTTCTTCC
TACTAACAACTCTGTGAGTGCGAGCTCATTCTGGAGGAGCTGGAAGTCTTAAAGATCATGCTCCTATAACAAC
AATGAAAATTTATCTATAAAAGCAACAGTTGTATGTGAGTTCCAATGAAGGGGTTTCCAGGTATCTCTGCACCG
CTGCCACATCTATGGTACAGCCTGTGCTGACTGCTGCGCTGGCGCGGGACCCTTATTGCGCCTGGGATGGCCATT
CTGTTCCAGATTTTACCCAACTGGGAAACGGAGGAGCCGAAGACAAGATGTGAGACATGGAAACCCACTGACTCA
ATGCAGAGGATTTAATCTAAAAGCATACGAAATGCAGCTGAAATTGTCCAGTATGGAGTAAAAAATAACACCAC
TTTTCTGGAGTGTGCCCCCAAGTCTCCGAGGCATCTATCAAGTGGCTGTTACAGAAAGACAAAGACAGGAGGAA
AGAGGTTAAGCTGAATGAACGAATAATAGCCACTTCACAGGGACTCCTGATCCGCTCTGTTTACGGGTTCTGACCA
AGGACTTTATCACTGCAATGCTACAGAAAATAGTTTCAAGCAGACCATAGCCAAGATCAACTTCAAAGTTTTAGA
TTCAGAAATGGTGGCTGTTGTGACGGACAAATGGTCCCCATGGACCTGGGCCAGCTCTGTGAGGGCTTTACCCTT
CCACCCGAAGGACATCATGGGGGCATTACGCCACTCAGAAATGCAGATGATTAACCAATATTGCAAAGACACTCG
GCAGCAACATCAGCAGGGAGATGAATCAGAGAAAATGAGAGGGGACTATGGCAAGTTAAAGGCCCTCATCAATAG
TCGGAAAAGTAGAAACAGGAGGAATCAGTTGCCAGAGTCATAATATTTTCTTATGTGGGTCTTATGCTTCCATTA
ACAAATGCTCTGTCTTCAATGATCAAATTTTGTGCTTTACCAAGGGGAATTACTGAAAAAG
GTGATTACTCCTGAAGTGAGTTTTACACGAACTGAAATGAGCATGCATTTTCTTGTATGATAGTACTAGCACTA
GACATGTCATGGTCTCATGGTGCATATAAATATATTTAACTTAACCCAGATTTTATTTATATCTTTATTCACCT
TTTCTTCAAATCGATATGGTGGCTGCAAACTAGAATTGTTGCATCCCTCAATTGAATGAGGGCCATATCCCTG
TGGTATTCTTTCTGCTTTGGGGCTTTAGAATTCTAATTGTGAGTATTTTGTATATGAAAACAAGTTCCAAAT
CCACAGCTTTTACGTAGTAAAGTCATAAATGCATATGACAGAATGGCTATCAAAGAAATAGAAAAGGAAGACA
GCATTTAAAGTTGTATAAAAACATGAGTTATTCATAAAGAGAAAATGATGAGTTTTTATGGTTCCAATGAAATAT
GTTGGGGTTTTTTTAAAGATTGTAAAAATAATCAGTTACTGGTATCTGTCACTGACCTTTGTTTCTTATTTCAGGA
AGATAAAAATCAGTAACCTACCCCATGAAGATATTTGGTGGGAGTTATATCAGTGAAGCAGTTTGGTTTATATTC
TTATGTTATCACCTTCCAAACAAAAGCACTTACTTTTTTTGGAAGTTATTTATTTTAGACTCAAAGAATATAATC

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FIGURE 2312B

TGGCACTACTCAGTTATTACTGTTTGTCTCTTATTCCCTAGTCTGTGTGGCAAATTAAACAATATAAGAAGGAA
AAATTTGAAGTATTAGACTTCTAAATAAGGTGTGAAATCATCAAAAAGAAAAATCAAAGTAGAACTACTAATTT
TTTAAGAGGAATTTATAACAAATATGGCTAGTTTTCAACTTCAGTACTCAAATTCATGATTCTTCTCTTTTATTA
AAACCAGTCTCAGATATCATACTGATTTTTAAGTCAACACTATATATTTTATGATCTTTTCAGTGTGATGGCAAG
GTGCTTGTATGTCTAGAAAGTAAGAAAACAATATGAGGAGACATTCTGTCTTTCAAAGGTAATGGTACATACG
TTCCTGCTCTCTAAGTGTAAAAGTAGTAAATTTTGTGATGAATAAAATAATTATCTCCTAATTGTATGTTAGAA
TAATTTTATTAGAATAATTTTCACTGAAATTTTTCTCCAAATAAAAAATTAGATGGAAAAATGTGAAAAAAT
TATTCATGCTCTCATATATATTTTAAAAACACTACTTTTGTCTTTTTTATTTACCTTTTAAGACATTTTCATGCTT
CCAGGTAAAAACAGATATTGTACCATGTACCTAATCCAAATATCATATAAACATTTTATTTATAGTTAATAATCT
ATGATGAAGGTAATTAAGTAGATTATGGCCTTTTTAAGTATTGCAGTCTAAAACCTCAAAAACATAAATCATTG
TCAAAATTAATATGATTATTAATCAGAATATCAGAATATGATTCACTATTTAACTATGATAAATTATGATAATA
TATGAGGAGGCCTCGCTATAGCAAAAATAGTTAAATGCTGACATAACACCAAACCTTCATTTTTTAAAAAATCTG
TTGTTCCAAATGTGTATAATTTTAAAGTAATTTCTAAAGCAGTTTATTATAATGGTTTGCCTGCTTAAAGGTAT
AATTAACTTCTTTTCTCTTCTACATTGACACACAGAAATGTGTCAATGTAAAGCCAAACCATCTTCTGTGTTT
ATGGCCAATCTATTCTCAAAGTTAAAGTAAATTTGTTTCAGAGTCACAGTTCCTTTTATTTACATAAGCCCAA
ACTGATAGACAGTAACGGTGTTTAGTTTTATACTATATTTGTGCTATTTAATTCTTTCTATTTTCACAATTATTA
AATTGTGTACACTTTCATTACTTTTAAAAATGTAGAAATCTTCATGAACATAACTCTGCTGAATGTAAAGAAA
ATTTTTTTTCAAAAATGCTGTTAATGTATACTACTGGTGGTTGATTGGTTTTATTTTATGTAGCTTGACAATTCA
GTGACTTAATATCTATTCCATTTGTATTGTACATAAAATTTTCTAGAAATACACTTTTTTCCAAAGTGTAAAGTTT
GTGAATAGATTTTAGCATGATGAACTGTCATAATGGTGAATGTTCAATCTGTGTAAGAAAACAACTAAATGTA
GTTGTCACACTAAAATTTAATTGGATATTGATGAAATCATTGGCCTGGCAAATAAAACATGTTGAATTCCTCC

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FIGURE 2313

CTTTCTGTCTTGATGACCTGTCTAGTGCTATAAATGAACACCTTTCTGCCCCTGGACGCCGCCGAAGAAGCATCG
TTAAAGTCTCTCTTCTCCCTGCCGTCATGTCTAAGTCAGAGTCTCCTAAAGAGCCCAAACAGCTGAGGAAGCTCT
TCATTGGAGGGTTGAGCTTTGAAACAACCAATGAGAGTCTGAGGAGCCATTTTGAGCAATGGGGAACGCTCATGG
ACTGTGTGGTAATGAGAGATCCAAACACCAAGTGCTCCAGGGGCTTTGGGTTTGTACATATGCCACTGTGGAGG
AGGTGGATGCAGCTATGAATGCAAGGCCACACAAGGTGGATGGAAGAGTTGTGGAATCAAAGAGAGCTGTTTCAA
GAGAAGATTCTCAAAGACCAGGTGCCCACTTAACTGTGAAAAAGATATTTGTTGGTGGCATTAAAGAAGACACCA
AAGAACATCACCTAAGAGATTATTTTGAACAGTATGGAAAAATTGAAGTGATTGAAATCATGACTGACCGAGGCA
GTGGCAAGAAAAAGGGGCTTTGCCCTTTGTAACTTTGACGACCATGACTCTGTGGATAAGATTGTCATTTCAGAAAT
ACCATACTGTGAATGGCCACATCTGTGAAGTTAGGAAAGCCCTGTCAAAGCAAGAGATGGCGAGTACTTCATCCA
GCCAAAGAGGTCAAAGTGGTCTGGAACTTTAGTGGTGGTCGTGGAGGTGGTTTCAGTGGGAATGACAACTTTG
GTCATGGAGGAACTTCAGTGGTCGTGGTGGCTTTGGTGGCAGCCGTGGTGCTGGTGGATATGGTGGCAGTGGGG
ATGGCTATAATGGATTTGGTAATGATGGAAGCAATTTTGGAGGTGGTGGGAAGCTACAATGATTTTGGCAATTACA
ACAATCAGTCTTCAAATTTTAGACCCATGAAGGGAGGAAATTTTGGAGGCAGAAGCTCTGGCCCCTATGGCGGTG
GAGGCAATACTTTGCAAAACCAAGGTGGCTATGGCAGTTCAGCAGCAGCAGTAGCTATGGCAGTGGCAGAAGAT
TTTAATTAGGAAACAAAGCTTAGCAGGAGAGGAGAGCCAGAGAAGTGACAGGGAAGCTACAGGTTACAAGAGATT
TGTGAATCAGCCAAGCACAGTGGTGGCAGGGCCTAGCTGCTACAAAGAAGACGTGTTTTAGACACATACTCATG
TGTATGGGCAAAAACTCGAGGACTGTATTTGTGACTAGCTGTATAACAGGTTATTTTAATTTCTATTCTGCGGA
AAGTGTAAGCATTCACAAAGGGTTTAATGTAGTTTTTTTTTGCACCCATGCTGTTGATTATTAAATGTAA
TAGTCTGATTGTGACACTGAATAAATGTCTTTTTT

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FIGURE 2314

MSKSESPKEPKQLRKLFIGGLSFETTNESLRSHFEQWGTLMDCVVMRDPNTKCSRGFGFVTYATVEEVDAAMNAR
PHKVDGRVVESKRAVSREDSQRPGAHLTVKKIFVGGIKEDTKEHHLRDYFEQYGKIEVIEIMTDRGSGKKRGFAF
VTFDDHDSVDKIVIQKYHTVNGHICEVRKALSKQEMASTSSSQRGQSGSGNFVVEATMILAITTISLQILD

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FIGURE 2315

CCTTTCTGCCCCGTGGACGCCGCCGAAGAAGCATCGTTAAAGTCTCTCTTCTCCCTGCCGTCATGTCTAAGTCAGA
GTCTCCTAAAGAGCCCCAAACAGCTGAGGAAGCTCTTCATTGGAGGGTTGAGCTTTGAAACAACCAATGAGAGTCT
GAGGAGCCATTTTGAGCAATGGGGAACGCTCATGGACTGTGTGGTAATGAGAGATCCAAACACCAAGTGCTCCAG
GGGCTTTGGGTTTGTACATATGCCACTGTGGAGGAGGTGGATGCAGCTATGAATGCAAGGCCACACAAGGTGGA
TGGAAGAGTTGTGGAATCAAAGAGAGCTGTTTCAAGAGAAGATTCTCAAAGACCAGGTGCCCACTTAAGTGTGAA
AAAGATATTTGTTGGTGGCATTAAAGAAGACACCAAAGAACATCACCTAAGAGATTATTTTGAACAGTATGTGGA
AGCAATTTTGGAGGTGGTGAAGCTACAATGATTTTGGCAATTACAACAATCAGTCTTCAAATTTTAGACCCATG
AAGGGAGGAAATTTTGGAGGCAGAAGCTCTGGCCCCCTATGGCGGTGGAGGCAATACTTTGCAAAACCAAGGTGGC
TATGGCAGTTCCAGCAGCAGCAGTAGCTATGGCAGTGGCAGAAGATTTTAATTAGGAAACAAAGCTTAGCAGGAG
AGGAGAGCCAGAGAAGTGACAGGGAAGCTACAGGTTACAAGAGATTTGTGAACTCAGCCAAGCACAGTGGTGGCA
GGGCCTAGCTG

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FIGURE 2316

AAGTCTCTCTTCTCCCTGCCGTGTCATGTCTAAGTCAGAGTCTCCTAAAGAGCCCAAACAGCTGAGGAAGCTCTTCA
TTGGAGGGTTGAGCTTTGAAACAACCAATGAGAGTCTGAGGAGCCATTTTGAGCAATGGGGAACGCTCATGGACT
GTGTGGTAATGAGAGATCCAAACACCAAGTGCTCCAGGGGCTTTGGGTTTGTACATATGCCACTGTGGAGGAGG
TGGATGCAGCTATGAATGCAAGGCCACACAAGGTGGATGGAAGAGTTGTGGAATCAAAGAGAGCTGTTTCAAGAG
AAGATTCTCAAAGACCAGGTGCCCACTTAAGTGTGAAAAAGATATTTGTTGGTGGCATTAAAGAAGACACCAAAG
AACATCACCTAAGAGATTATTTTGAACAGTATGGAAAAATTGAAGTGATTGAAATCATGACTGACCGAGGCAGTG
GCAAGAAAAGGGGCTTTGCCTTTGTAACTTTGACGACCATGACTCTGTGGATAAGATTGTCATTGAGAAATACC
ATACTGTGAATGGCCACATCTGTGAAGTTAGGAAAGCCCTGTCAAAGCAAGAGATGGCGAGTACTTCATCCAGCC
AAAGAGGTCAAAGTGGTTCTGGAACTTTAGTGGTGGTTCGTGGAGGTGGTTTCAGTGGGAATGACAACTTTGGTC
ATGGAGGAACTTCAGTGGTTCGTGGTGGCTTTGGATGGCTATAATGGATTGGTAATGATGGAAGCAATTTTGGA
GGTGGTGGGAAGCTACAATGATTTTGGCAATTACAACAATCAGTCTTCAAATTTTAGACCCATGAAGGGAGGAAAT
TTTGGAGGCAGAAGCTCTGGCCCCTATGGCGGTGGAGGCAATACTTTGCAA

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FIGURE 2317

CCCTGCCGTCATGTCTAAGTCAGAGTCTCCTAAAGAGCCCAAACAGCTGAGGAAGCTCTTCATTGGAGGGTTGAG
CTTTGAAACAACCAATGAGAGTCTGAGGAGCCATTTTGAGCAATGGGGAACGCTCATGGACTGTGTGGTAATGAG
AGATCCAAACACCAAGTGCTCCAGGGGCTTTGGGTTTGTACATATGCCACTGTGGAGGAGGTGGATGCAGCTAT
GAATGCAAGGCCACACAAGGTGGATGGAAGAGTTGTGGAATCAAAGAGAGCTGTTTCAAGAGAAGATTCTCAAAG
ACCAGGTGCCCCTTAAGTGTGAAAAAGATATTTGTTGGTGGCATTAAAGAAGACACCAAAGAATCACCTAAG
AGATTATTTTGAACAGTATGGAAAATTGAAGTGATTGAAATCATGACTGACCGAGGCAGTGGCAAGAAAAGGGG
CTTTGCCTTTGTAACTTTGACGACCATGACTCGGTGGCTTTGGTGGCAGCCGTGGTGCTGGTGGATATGGTGGC
AGTGGGGATGGCTATAATGGATTTGGTAATGATGGAAGCAATTTTGGAGGTGGTGGGAAGCTACAATGATTTTGGC
AATTACAACAATCAGTCTTCAAATTTTAGACCCATGAAGGG

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FIGURE 2318

ATGCCAACTATGTCACCTTTACGGATACCAAACAATTGATTAGTGATACTCCAAATAATCAAGTTCCAATGAAC
CGTGCCAGCATGGCTTTTGATGCCAAATGTCTGACTGGATGCAGATTGATGATGCCATTGTCCAGTTTGATATG
ACATATTGGCCTTTCACGGTGGTAAATGATGCTGGCAGGCCCAAGGTCCAAGTAGAGTATGAGAGAGACAAAAAG
CTGCTACCCATAGGAGGTGTCTTCTATGGTTCTGACAAAGATGAAGGAAATTGCAAAAGTCTACCTTGGGAAGAC
TGTTACCAATGCTGTGGTCACAGTGCCAGCTTACTTGAATGA

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FIGURE 2319A

GTAACAACCGTCAACCCTGGGTCCCGACTGCCACCTCCTCCTCCTCCCCCTCCCCCAACAACAACAACAAC
AACTCCAAGCACACCGGCCATAAGAGTGCGTGTGTCCCCAACATGACCGAACGAAGAAGGGACGAGCTCTCTGAA
GAGATCAACAACCTTAAGAGAGAAGGTCATGAAGCAGTCGGAGGAGAACAACAACCTGCAGAGCCAGGTGCAGAAG
CTCACAGAGGAGAACCACCCCTTCGAGAGCAAGTGGAACCCACCCCTGAGGATGAGGATGATGACATCGAGCTC
CGCGGTGCTGCAGCAGCTGCTGCCCCACCCCTCCAATAGAGGAAGAGTGCCAGAACACCTCCAGAGAAGTTT
GATGGCAACCCAGACATGCTGGCTCCTTTTCATGGCCAGTGCCAGATCTTCATGGAAAAGAGCACCAGGGATTTC
TCAGTTGATCGTGTCCGTGTCTGCTTCGTGACAAGCATGATGACCGGCCGTGCTGCCCCGTGGGCCCTCAGCAAAG
CTGGAGCGCTCCCCTACCTGATGCACAACCTACCCAGCTTTCATGATGGAAAATGAAGCATGCTTTGAAGACCCCT
CAGAGGCGAGAGGTTGCCAAACGCAAGATCAGACGCTGCGCCAAGGCATGGGGTCTGTCTCATCGACTACTCCAAT
GCTTTCCAGATGATTGCCAGGACCTGGATTGGAACGAGCCTGCGCTGATTGACCAGTACCACGAGGGCCCTCAGC
GACCACATTCAGGAGGAGCTCTCCACCTCGAGGTGCGCAAGTCGCTGTCTGCTCTGATTGGGCAGTGCAATTCAC
ATTGAGAGAAGGCTGGCCAGGGCTGCTGCAGCTCGCAAGCCAGCTCGCCACCCGGGCGCTGGTGTGCTCAC
ATTGCAAGCCACCACCAGGTAGATCCAACCGAGCCGGTGGGAGGTGCCCGCATGCGCCTGACGCAGGAAGAAAA
GAAAGACGCAGAAAGCTGAACCTGTGCCTCTACTGTGGAACAGGAGGTCACTACGCTGACAATGTCTCTGCCAAG
GCCTCAAAGTCTTCGCCGGCGGGAAACTCCCGGCCCGCTGTAGAGGGACCTTCAGCGACCGGGCCAGAAATAA
TAAGGTCCCCACAAGATGATGCCTCATCTCCACACTTGCAAGTGATGCTCCAGATTTCATCTTCGGGGCAGACACA
CCCTGTTTCGTCCGAGCCATGATCGATTCTGGTGCTTCTGGCAACTTCATTGATCAGGAATATGTTGCTCAAAATG
GAATTCTCTAAGAATCAAGGACTGGCCAATACTTGTGGAAGCAATTGATGGGCGCCCCATAGCATCGGGCCAG
TTGTCCACGAAACTCACGACCTGATAGTTGACCTGGGAGATCACCGAGAGGTGCTGTCAATTTGATGTGACTCAGT
CTCCATTCTTCCCTGTGCTCCTAGGGGTTCGCTGGCTGAGCACACATGATCCCAATATCACATGGAGCACTCGAT
CTATCGTCTTTGATTCTGAATACTGCCGCTACCACTGCCGGATGTATTCTCCAATACCACCTCGCTCCCACCAC
CAGCACCACAACCGCCACTCTATTATCCAGTAGATGGATACAGAGTTTACCAACCAGTGAGGTATTACTATGTCC
AGAATGTGTACACTCCAGTAGATGAGCACGCTCTACCCAGATACCCGCTGGTTGACCCTCACATAGAAATGATAC
CTGGAGCACACAGTATTTCCAGTGGACATGTGTATTCACTGTCCGAACCTGAAATGGCAGCTCTTCGAGATTTTG
TGGCAAGAAATGTAAAGATGGGCTAATTACTCCAACGATTGCACCTAATGGAGCCCAAGTTCTCCAGGTGAAGA
GGGGGTGGAACTGCAAGTTTCTTATGATTGCCGAGCTCCAACAATTTTACTATCCAGAATCAGTATCCTCGCC
TATCTATTCCAAATTTAGAAGACCAAGCACACCTACCCAGTAGGATTGCGCTGGTACCCAGTGGGACGAGACGGAC
AAACATACCCACATATGCCGCGTACCCGACCTACCCAGTAGGATTGCGCTGGTACCCAGTGGGACGAGACGGAC
AAGGAAGATCACTATATGTACCTGTGATGATCACTTGGAAATCCACACTGGTACCGCCAGCCTCCGGTACCACAGT
ACCCGCGCCACAGCCGCGCCTCCACCACCACCACCGCCGCGCCTCCATCTTACAGTACCCTGTAAATACCTG
TCATGTCTTTCAGGATCTCTGCCCTCAAATTTATTCTGTTTCAGCTTCTCAATCAGTGACTGTGTGCTAAATTT
TAGGCTACTGTATCTTCAGGCCACCTGAGGCACATCTCTCTGAAACGGCTATGGAAGGTTAGGGCCACTCTGGA
CTGGCACACATCTTAAGCACCAAAAGACCTTCAACATTTTCTGAGAGCAACAGAGTATTTGCCAATAAATGATC
TCTCATTTTTCACCTTGACTGCCAATCTAACTAAAATAATTAATAAGTTTACTTTCCAGCCAGTCTTGGAAAGTC
TGGGTTTTACCTGCCAAAACCTCCATCACCATCTAAATTATAGGCTGCCAAATTTGCTGTTTAAACATTTACAGAG
AAGCTGATACAAACGCAGGAAATGCTGATTTCTTTATGGAGGGGAGACGAGGAGGAGGAGGACATGACTTTTCT
TGCGGTTTCGGTACCCTCTTTTAAATCACTGGAGGACTGAGGCCTTATTAAGGAAGCCAAAATTATCGGTGCAG
TGTGGAAGGCTTCCGTGATCCTCTCGCTGCACCTTAGAACTTCACCGTCTTCAAACCTCCATTTCCATGGTTT
TGTTAATTCTCAAGGAGCAGCAACTCGACTGGTTCTCCAGGAGCAGGAAAAACCTTGTGACATGAAACATCTC
AGGCCTGAAAAGAAAGTGCTCTCTCAGATGGACTCTTGATGTTAAGACTATGTCTTCACATCATGGTGCAATC
ACATGTACCCAATGACTCCGGCTTTGACACAACACCTTACCATCATCATGCCATGATGGCTTCCACAAGCATT
AACCTGGTAACCAGAGATTACTGGTGGCTCCAGCGTTGTTAGATGTTTCATGAAATGTGACCACCTCTCAATCACC
TTTGAAGGCTAAAGAGTAGCACATCAAAAGGACTCCAAAATCCCATACCAACTCTTAAGAGATTTGTCTGGTA
CTTCAGAAAGAAATTTTCATGAGTGTTCTTAATTGGCTGGAAGAGCAGCTGACGTTTTGGAAGAATCTATCCA
TGTGTCTGCCTCCATATGCATCTGGGCATTTTCATCTTCAGTCCCCTCATTAGACTGTAGCATTAGGATGTGTGGA
GAGAGGAGAAATGATTTAGCACCCAGATTACACTCCTATGCCTGGAAGGGGACATCTTTGAAGAAGAGGAATT
AGGGCTGTGGACACTGTCTTGAGGATGTGGACTTCCTTAGTGAGCTCCACATTACTTGATGGTAACCACTTCAA
AGGATCAGAATCCACGTAATGAAAAAGGTCCCTCTAGAGGATGGAGCTGATGTGAAGCTGCCAATGGATGAAAA

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FIGURE 2319B

CCTCAGAAAGCAACTCAAAGGACTCAAAGCAACGGACAACACAAGAGTTGTCTTCAGCCCAGTGACACCTCTGAT
GTCCCCTGGAAGCTTTGTGCTAACCTGGGACTGCCTGACTTCCTTTAGCCTGGTCCCCTTGCTACTACCTTGAAC
GTTTTATCTAACCTCTCTTTTTCTGTTAATTCTTTGCTACTGCCATTGACCCTGCTGCAGGATTTGTGTCATTT
TCCTGCCTGGTTGCTGAGACTCCATTTTGTGCCACACACAGAGATGTAAGAGGCAGGCTTTAATTGCCAAAGCA
CAGTTTGAGCAGTAGAAAACAACATGGTGTATATCTCAAATTGCCTGACATGAAGAGGAGTCTAACGGTGAAGTT
TCACTTTTTCATCAGCATCATCTTTCACATGTTTATTATCATCCGCTCTTATTCTTGTCATGTTTAAACACTTAAAA
TTTTTAGTATAATTTTTAGTGTGTTTTGAAGTGGTGAAGGCTTTCAAAAACCTCCATTGAATTACAAAGCACT
ATCCAGTTCTTATTGTTAAACTAAGTAAAAATGATAAGTAACATAGTGTAAAATATTCCTTTACTGTGAACCTCT
TACAATGCTGTGAATGAGAGGCTCCTCAGAACTGGAGCATTGTGATAATAATTCATCCTGTTTCATCTTCAATTTT
AACATCATATATAATTTCAATTCTATCAATTGGGCCTTTAAAAATCATATAAAAGGATATAAAATTTGAAAAGAG
AAACCTAATTGGCTATTTAATCCAAAACAACCTTTTTTTTTTCTTCAATGGAATCAGAAAGCTTGTCATCACTC
ATGTGTTTTAGAGTAATTACTTTTTAAATGGTGCATTTGTGCTTCTGAACATTTTGAAGAGTCACTTCTGTTTA
CCTCAAGTATCAATTCATCCTCCATACATTTGAATTCAAGTTGTTTTTGTCAAATTTACAGTTGTCAATTGATC
TTCAAGCTGCAGGGTGCCTAGAAATGGGCCGTTGTCTGTAGCCCTGGCATGTGCACACGGACATTTGCCACCACT
GCAAGCAAAAGTCTGGAGAAGTTCACCAACGACAAGAAGCATTAGGGAATATGCTGCTGTGGGTAAACAAC
AGAAAGTCCCTGATCCACATTTGGCTGTTTACTAAAGCTTGTGATTAACTTTTTGGCAGTGTGTACTATGCTCTA
TTGCTATATATGCTATCTATAAATGTAGATGTTAAGGATAAGTAATTTCTAAATTTATTATTCTATAGTTTTGAAG
TTTGGTTAAGTTTTCTTTCACTCAATTGATTTATTTTGTGTTAATCAAATTTATGTTAATTGGATCCTTTAAAT
TTTTTTTTGGCATTTTCCAACAAAAATGGCTTTATTCATAAGAAAGGAAAAAATCAATGGAATTTGATATCTAAA
GAAGTTAGAAAGGGAGCAAAATAAAAAACATAAAGGAGATAGATGAATTAGTAAGCAAATCAGTAGTCGAGTTTT
TCAAAC TGGCAAAATTAATTAATTGACTTTTAGCCCAAATTTACATTGTTAATTAAATCAAGAAGGAAGAAGATC
TAAGAGCTCCCATTTGATAGGCAAGCCTAGAGAGAAGTCTAAATTTATCATGCTAGGATATTGAAACACAGAAA
GTTTACATACATTTATGAAGGGTCAATTTAGTTTGGACAGTGAAGTATTTGTCTTAGTGGAAGGAGGAGAAATTA
GTCTGATCAAATCGTGAAGTAATACAGTGAACCTGCAGGTGCACAAAATAAGAGGGCCACATCTATATGGTGCAG
TCTGGAATTTCTGTTAAGTTTGTAGGTACCTCTTGGACTTCTGAATTGATCCAGTTGTCATCCACCACAGACATC
TCACATCAGATACAGACAGTTCCAAGATTGACAACAGAGAACAACCTGCTGGAAGACCTGGGCAGAAATGGAGA
GCCCTGCGGGAACCATGCTACATTTTCATCTAAAGAGAGAATGCACATCTGATGAGACTGAAAGTTCTTTGTGT
TTTAGATTGTAGAATGGTATTGAATTGGTCTGTGGAATTTGCATTGCTTTTTATTTCTTTGTGTAATCAAGTTTA
AGTAATAGGGGATATATAATCATAAGCATTTTAGGGTGGGAGGGACTATTAAGTAATTTAAGTGGGTGGGGTTA
TTTAGAATGTTAGAATAATATTATGTATTAGATATCGCTATAAGTGGACATGCGTACTTACTTGTAAACCCTTTAC
CCTATAATTGCTATCCTTAAAGATTTCAAATAAACTCGGAGGGAAGTGCAGGGAGACCAACTTATTTAGAGCGAA
TTGGACATGGATAAAAACCCAGTGGGAGAAAGTTCAAAGGTGATTAGATTAATAATTTAATAGAGGATGAGTGA
CCTCTGATAAATTACTGCTAGAATGAACTTGTCAATGATGGATGGTAAATTTTCATGGAAGTTATAAAAGTGATA
AATAAAAACCCCTTGCTTTTACCCCTGTGCTAGTCCCTCCTACCCTGAACCCATTGCCCTACCCCTCCTT
CTAACTTTATTGCTGTATTCTCTTCACTCTATATTTCTCTCTATTTGCTAATATTGCATTGCTGTTACAATAAAA
ATTCAATAAAGATTTAGTGGTTAAGTGC

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FIGURE 2320

MTERRRDELSEEINNLRKVMKQSEENNNLQSQVQKLTEENTTLREQVEPTPEDEDDDIELRGAAAAAAPPPPIE
EECPEDLPEKFDGNPDMLAPFMAQCQIFMEKSTRDFSVDVRVRCFVTSMGTGRAARWASAKLERSHYLMHNYPAF
MMEMKHVFEDPQRREVAKRKIRRLRQGMGSVIDYSNAFQMIAQDLWNEPALIDQYHEGLSDHIQEELSHLEVAK
SLSALIGQCIHIERRLARAAAARKPRSPPRALVLP HIASHHQVDPTEPVGGARMRLTQEEKERRRKLNLCLYCGT
GGHYADNCPAKASKSSPAGNSPAPL

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FIGURE 2321A

AGCACCACGGCAGCAGGAGGTTTCGGCTAAGTTGGAGGTAAGTGGCCACGACTGCATGCCCCGCGCCCGCCAGGTGA
TACCTCCGCGCGGTGACCCAGGGGCTCTGCGACACAAGGAGTCTGCATGTCTAAGTGCTAGACATGCTCAGCTTTG
TGGATACGCGGACTTTGTTGCTGCTTGCAGTAACCTTATGCCATAGCAACATGCCAATCTTTACAAGAGGAAACTG
TAAGAAAGGGCCCCAGCCGGAGATAGAGGACCACGTGGAGAAAGGGGTCCACCAGGCCCCCAGGCAGAGATGGTG
AAGATGGTCCCACAGGCCCTCCTGGTCCACCTGGTCCCTCGGCCCCCTGGTCTCGGTGGGAACCTTTGCTGCTC
AGTATGATGGAAAAGGAGTTGGACTTGGCCCTGGACCAATGGGCTTAATGGGACCTAGAGGCCACCTGGTGCAG
CTGGAGCCCCAGGCCCTCAAGGTTTCCAAGGACCTGCTGGTGAGCCTGGTGAACCTGGTCAAACCTGGTCTGCAG
GTGCTCGTGGTCCAGCTGGCCCTCCTGGCAAGGCTGGTGAAGATGGTCACCTGGAAAACCCGGACGACCTGGTG
AGAGAGGAGTTGTTGGACCACAGGGTGCTCGTGGTTTCCCTGGAACTCCTGGACTTCTGGCTTCAAAGGCATTA
GGGGACACAATGGTCTGGATGGATTGAAGGGACAGCCCGGTGCTCCTGGTGTGAAGGGTGAACCTGGTGGCCCTG
GTGAAAATGGAACCTCAGGTCAAACAGGAGCCCGTGGGCTTCTGGTGAGAGAGGACGTGTTGGTGGCCCTGGCC
CAGCTGGTGGCCGTGGCAGTGATGGAAGTGTGGGTCCCGTGGGTCTGCTGGTCCCATTGGGTCTGCTGGCCCTC
CAGGCTTCCCAGGTGCCCTGGCCCCAAGGGTGAATTTGGAGCTATTGGTAACGCTGGTCTGCTGGTCCCGCCG
GTCCCCGTGGTGAAGTGGGTCTTCCAGGCCTCTCCGGCCCGTGGACCTCCTGGTAATCCTGGAGCAAACGGCC
TTACTGGTGCCAAGGGTGCTGCTGGCCTTCCCGCGTGTGCTGGGGCTCCCGCCTCCCTGGACCCCGCGGTATT
CTGGCCCTGTTGGTGCTGCCGGTGCTACTGGTGCCAGAGGACTTGTGGTGAGCCTGGTCCAGCTGGCTCCAAAG
GAGAGAGCGGTAACAAGGGTGAGCCCGGTCTGCTGGGCCCAAGGTCCTCCTGGTCCAGTGGTGAAGAAGGAA
AGAGAGGCCCTAATGGGGAAGCTGGATCTGCCGGCCCTCCAGGACCTCCTGGGCTGAGAGGTAGTCTGGTTCTC
GTGGTCTTCTGGAGCTGATGGCAGAGCTGGCGTATGGGCCCTCCTGGTAGTCGTGGTGCAAGTGGCCCTGCTG
GAGTCCGAGGACCTAATGGAGATGCTGGTCCGCTGGGGAGCCTGGTCTCATGGGACCAGAGGTCTTCTGGTT
CCCCCTGGAAATATCGGCCCGCTGGAAAAGAAGGTCCTGTGGCCCTCCCTGGCATCGACGGCAGGCCTGGCCAA
TTGGCCCCGTGGAGCAAGAGGAGAGCCTGGCAACATTGGATTCCCTGGACCCAAAGGCCCACTGGTGACCCTG
GCAAAAACGGTGATAAAGGTATGCTGGTCTTGTGGTGCTCGGGTGCTCCAGGTCTGTAGTGAACAATGGTG
CTCAGGGACCTCCTGGACCACAGGGTGTTCAGGTGGAAAAGGTGAACAGGGTCCCGCTGGTCTCCAGGCTTCC
AGGGTCTGCCTGGCCCCCTCAGGTCCCGCTGGTGAAGTTGGCAAACAGGAGAAAGGGGTCTCCATGGTGAGTTTG
GTCTCCCTGGTCTGCTGGTCCAAGAGGGGAACGCGGTCCCCAGGTGAGAGTGGTGCTGCCGGTCTTACTGGTC
CTATTGGAAGCCGAGGTCTTCTGGACCCCAAGGGCTCCTAGGAGAGAGGGGTGCTGCTGGCATACTGGAGGCAAGG
TGGGCACTGCTGGTCCATCTGGTCTTAGTGGAATCCAGGAGAGAGGGGTGCTGCTGGCATACTGGAGGCAAGG
GAGAAAAGGGTGAACCTGGTCTCAGAGGTGAATTTGGTAACCTGGCAGAGATGGTGCTCGTGGTGTCTAGGTG
CTGTAGGTGCCCTGGTCTGCTGGAGCCAAGGTGACCGGGGCGAAGCTGGGGCTGCTGGTCTGCTGGTCTGCTG
CTGGTCTCGGGGAAGCCCTGGTGAACGTGGCGAGGTGGTCTGCTGGCCCCAACGGATTGCTGGTCCGGCTG
GTGCTGCTGGTCAACCGGGTGCTAAAGGAGAAAGAGGAGGCAAGGGCTAAGGGTGAACCGGTGTTGTTGGTC
CCACAGGCCCCGTGGATGAGCTGCTGGCCAGCTGGTCCAAATGGTCCCCCGGTCTGCTGGAAGTCGTGGTGATG
GAGGCCCCCTGGTATGACTGGTTTTCCCTGGTGCTGCTGGACGGACTGGTCCCCCAGGACCTCTGGTATTTCTG
GCCCCCTGGTGGTCCCCCTGGTCTGCTGGGAAAGAAGGGCTTCTGGTCTGCTGGTGACCAAGGTCCAGTTGGCC
GAACCTGGAGAAGTAGGTGCAGTTGGTCCCCCTGGCTTCTGGTGGTGAAGGGTCCCTCTGGAGAGGCTGGTACTG
CTGGACCTCCTGGCACTCCAGGTCTCAGGGTCTTCTTGGTGCTCCTGGTATTCTGGGTCTCCCTGGCTCGAGAG
GTGAACGTGGTCTACCTGGTGTGCTGGTGCTGTGGGTGAACCTGGTCTCTTGGCATTGCCGGCCCTCCTGGGG
CCCGTGGTCTCCTGGTGTGCTGGGTAGTCTGGAGTCAACGGTGTCTCCTGGTGAAGCTGGTCTGATGGCAACC
CTGGGAACGATGGTCCCCCAGGTGCGATGGTCAACCCGGACACAAGGGAGAGCGCGTTACCCTGGCAATATTG
GTCCCGTTGGTGCTGCAGGTGCACCTGGTCTCATGGCCCCGTGGGTCTGCTGGCAAACATGGAAACCGTGGTG
AAACTGGTCTTCTGGTCTGTTGGTCTGCTGGTGCTGTTGGCCCAAGAGGTCTTAGTGGCCACAAGGCATT
GTGGCGATAAGGGAGAGCCCGGTGAAAAGGGGCCAGAGGTCTTCTGGCTTCAAGGGACACAATGGATTGCAAG
GTCTGCCTGGTATCGCTGGTACCATGGTGATCAAGGTGCTCCTGGCTCCGTGGGTCTGCTGGTCTTAGGGGCC
CTGCTGGTCTTCTGGCCCTGCTGGAAAAGATGGTGCACCTGGACATCCTGGTACGGTTGGACCTGCTGGCATT
GAGGCCCTCAGGGTACCAAGGCCCTGCTGGCCCCCTGGTCCCCCTGGCCCTCCTGGACCTCCAGGTGTAAGCG
GTGGTGGTTATGACTTTGGTTACGATGGAGACTTCTACAGGGCTGACCAGCCTCGCTCAGCACCTTCTCTCAGAC
CCAAGGACTATGAAGTTGATGCTACTCTGAAGTCTCTCAACAACCAGATTGAGACCCTTCTTACTCCTGAAGGCT

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FIGURE 2321B

CTAGAAAGAACCCAGCTCGCACATGCCGTGACTTGAGACTCAGCCACCCAGAGTGGAGCAGTGGTTACTACTGGA
TTGACCCCAACCAAGGATGCACTATGGAAGCCATCAAAGTATACTGTGATTTCCCTACCGGCGAAACCTGTATCC
GGGCCCCAACCTGAAAACATCCCAGCCAAGAACTGGTATAGGAGCTCCAAGGACAAGAAACACGTCTGGCTAGGAG
AAACTATCAATGCTGGCAGCCAGTTTGAATATAATGTTGAAGGAGTGACTTCCAAGGAAATGGCTACCCAACCTG
CCTTCATGCGCCTGCTGGCCAACTATGCCTCTCAGAACATCACCTACCACTGCAAGAACAGCATTGCATACATGG
ATGAGGAGACTGGCAACCTGAAAAAGGCTGTCATTCTACAGGGCTCTAATGATGTTGAACTTGTTGCTGAGGGCA
ACAGCAGGTTCACTTACACTGTTCTTGTAGATGGCTGCTCTAAAAAGACAAATGAATGGGGAAAGACAATCATTG
AATACAAAACAAATAAGCCATCACGCCTGCCCTTCCTTGATATTGCACCTTTGGACATCGGTGGTGCTGACCATG
AATTCTTTGTGGACATTGGCCAGTCTGTTTCAAATAAATGAACTCAATCTAAATTAAAAAAGAAAGAAATTTGA
AAAACTTTCTCTTTGCCATTTCTTCTTCTTTTTTAAGTGAAGCTGAATCCTTCCATTTCTTCTGCACATC
TACTTGCTTAAATTGTGGGCAAAAGAGAAAAAGAAGGATTGATCAGAGCATTGTGCAATACAGTTTCATTAATC
CTTCCCCCGCTCCCCAAAAATTTGAATTTTTTTTTTCAACACTCTTACACCTGTTATGGAAAATGTCAACCTTTG
TAAGAAAACCAAAATAAAAAATTGAAAAATAAAACCATAAACATTTGCACCACTTGTGGCTTTTGAATATCTTCC
ACAGAGGGGAAGTTTAAAACCCAAACTTCCAAAGGTTTAAACTACCTCAAAACACTTTCCCATGAGTGTGATCCAC
ATTGTTAGGTGCTGACCTAGACAGAGATGAACTGAGGTCCTTGTTTTGTTTTGTTTCATAATACAAAGGTGCTAAT
TAATAGTATTTAGATACTTGAAGAATGTTGATGGTGCTAGAAGAATTTGAGAAGAAATACTCCTGTATTGAGTT
GTATCGTGTGGTGATTTTTTTAAAAAATTTGATTTAGCATTCAATTTTCCATCTTATTCCCAATTAAAAAGTATG
CAGATTATTTGCCCAAAGTTGTCCTCTTCTCAGATTGAGCATTGTTCTTTGCCAGTCTCATTTTTCATCTTCTT
CCATGGTTCCACAGAAGCTTTGTTTCTTGGGCAAGCAGAAAAATTAAATTGTACCTATTTTGTATATGTGAGATG
TTTAAATAAATTGTGAAAAAATGAAATAAAGCATGTTTGTTTTCCAAAAGAACATAT

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FIGURE 2322

ATTTAACTTTTAAATGCTTTTTCTACAATATGCTATAAATATAAGAAAAATTAAAATTCACATAACAGCAAGACTAC
ATACCCACCCAGGTCCCGCTCCCAAAGACACACATAGAGGGACATACACACAACAATCCTAAAAATGACTTTGTA
GAGATAGGTCACCTTGAATGTGTGTTGAAATGTTGTTGGTTTTTTTTGGTTGGTTTGTGTTGTTGTTTTTTGTTAG
ACTGATAGGGAGCCCCTCCCACTAAAGACACCCCTTGATACTGTTATTTCAAGGATGAACCTATTATCTGGGACA
GACATCTTCAGAATGACACATGCCAAACAGTGGTTCTTATTAAATCAAAGGTTGAGATATTATCAGATTCAGAAA
TAGTGATGCTTTGTGTATCTATTTTCTTCTCTTTAAACAGAAAAAGACAAATGAATGGGGAAAGACAATCATTGA
ATACAAAACAAATAAGCCATCACGCCTGCCCTTCCTTGATATTGCACCTTTGGACATCGGTGGTGCTGACCATGA
ATTCTTTGTGGACATTGGCCAGTCTGTTTCAAATAAATGAACTCAATCTAAATTAAAAAAGAAAGAAATTTGGA
GAAAAAGAAGGATTGATCAGAGCATTGTGCAATACAGTTTCATTAACCTCCTTCCCCCGCTCCCCCAAAATTTGA
ATTTTTTTTTCAACACTCTTACACCTGTTATGGAAAATGTCAACCTTTGTAAGAAAACCAAAATAAAATTTGAAA
AATAAAAACCATAAACATTTGCACCACTTGTGGCTTTTGAATATCTTCCACAGAGGGAAGTTTAAACCCAACT
TCCAAAGGTTTAAACTACCTCAAACACTTTCCCATGAGTGTGATCCACATTGTTAGGTGCTGACCTAGACAGAG
ATGAACTGAGGTCCTTGTGTTTTGTTTGTTCATAATACAAAGGTGCTAATTAATAGTATTTGAGATACTTGAAGAA
TGTTGATGGTGCTAGAAGAATTTGAGAAGAAATACTCCTGTATTGAGTTGTATCGTGTGGTGTATTTTTTAA

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FIGURE 2323

CATCCGTGGACTTGGAGGCTGGCTCGGGCCCCGCACCTCCCATCCCCAGCTGCCCCGCAACCCCCAGTGA CT CGGGA
TCCCCCGGAGAGCCCTCCCCTCTCGGCAGGAGGGGGCTGACTCAGGGAGAAATGGCAGTTTAGGGCCTAGGGGGC
CACGTGACCCTCCCCAGGAATGTGGTGACGTATCGGAGGCGTGGTCGTCCCCAAAATTAGGGAGGAAGAGGAA
AAAAAAAAGCCAGAAAAAGTTTTCTTTCTGGAGTCCCAAACGAGGTGCGGGACGGAAGAGGGGGTGAAGGCCAG
AGGCTCGGGGCTTCAAGACCGCTGTCTGGAGTCCCCCTTTCCAGGCCATGTGCGGGCCCCACCTGGCTGCCCCGA
AGCAGCCGGAGCCCGCCAGAGCCCTCAGGGGAGGGCGATCCCCCGCGGCACCCCGGGGCCACACCGGCCACG
GAGCAGCACTCCAGCCCCACCCAGGGTCAATTTTTGCCCCCTTCCATCTGAGCAGTGTTACCAGGGCCCCAGGGG
GACCGGAGGATCGGGGGCCGGCGTGGGTGGGGTCCCATGGAGTACTCCAGCACACGCAGGGGGCTCCCTGCAGACA
GGGGGGGCTTTCGCCCTGGAAGCCTGGACGCCGAGATAGACTTGCTGAGCAGCACGCTGGCCGAGCTGAATGGGG
GTCGGGGTCATGCGTCACGGCGACCAGACCGACAGGCATATGAGCCCCCGCCACCTCCTGCCCTACCGCACGGGCT
CCCTGAAGCCAAATCCAGCCTCGCCGCTCCCAGCGTCTCCCTATGGGGGGCCCCACTCCAGCCTCTTACACTACCG
CCAGCACCCCGGCTGGCCCAGCCTTCCCCGTGCAAGTGAAGGTGGCACAGCCAGTGAGGGGGCTGCGGGCCACCCA
GGCGGGGAGCCTCTCAGGCCTCTGGGCCCCCTCCCGGGCCCCCACTTTCCTCTCCAGGCCGAGGTGAAGTCTGGG
GGCCTGGCTATAGGAGCCAGAGAGAGCCAGGGCCAGGGGCCAAAGAGGAAGCTGCTGGGGTCTCTGGCCCTGCAG
GAAGAGGAAGAGGAGGCGAGCACGGGCCCCAGGTGCCCCTGAGCCAGCCTCCAGAGGATGAGCTGGATAGGCTGA
CGAAGAAGCTGGTTACACACATGAACCACCCGCCAGCGGGAGTACTTTGGCCAGTGTGGTGGCTGCGGAGAAAG
ATGTGGTTGGGGATGGGGCTGGGGTGTGGCCCTTGATCGCGTCTTTCACGTGGGCTGCTTTGTATGTTCTACAT
GCCGGGCCCCAGCTTCGCGGCCAGCATTTCTACGCCGTGGAGAGGAGGGCATATTGCGAGGGCTGCTACGTGGCCA
CCCTGGAGAAATGTGCCACGTGCTCCCAGCCCATCCTGGACCGGATCCTGCGGGCTATGGGGAAGGCCTACCACC
CTGGCTGCTTACCTGCGTGGTGTGTACCCGCGGCCTCGACGGCATCCCCTTACAGTGGATGCTACGAGCCAGA
TCCACTGCATTGAGGACTTTCACAGGAAGTTTGCCCCAAGATGCTCAGTGTGCGGTGGGGCCATAATGCCTGAGC
CAGGTCAGGAGGAGACTGTGAGAATTGTTGCTCTGGATCGAAGTTTTACATTGGCTGTTACAAGTGCGAGGAGT
GTGGGCTGCTGCTCTCCTCTGAGGGCGAGTGTGAGGGCTGCTACCCGCTGGATGGGCACATCTTGTGCAAGGCCT
GCAGCGCCTGGCGCATCCAGGAGCTCTCAGCCACCGTCACCACTGACTGCTGAGTCTTCCTAGAAGTACCTGCTG
GGTTCTCAGTTCAGTTCATCCTTTGATTGATCACTCTCCCTGACATCCACCTGTATGACTTTGTACCCAAAT
GCTGTCTTCTCTTCTCCAATCAAGAAATAATAATCCCTCGAGTTTACAAAACACTTCCAAGTCTGTTGTCTCAT
CTGATTCTCCAGTAGCCCATACAGGCCAGTCATTGTT

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FIGURE 2324

MSGPTWLPPKQPEPARAPQGRAIPRGTPGPPPAHGAALQPHPRVNFCLPSEQCYQAPGGPEDRGPAWVGSHGVL
QHTQGLPADRGGLRPGSLDAEIDLLSSTLAELNGGRGHASRRPDRQAYEPPPPPAYRTGSLKPNPASPLPASPYG
GPTPASYYTASTPAGPAFPVQVKVAQPVRGCGPPRRGASQASGPLPGPHFPLPGRGEVWGPGYRSQREPGPGAKE
EAAGVSGPAGRGRGGEHGPQVPLSQPPEDELDRLTKKLVHDMNHPPSGEYFGQCGGCGEDVVG DGAGVVALDRVF
HVGCFVCSTCRAQLRGQHFYAVERRAYCEGCVATLEKCATCSQPILDRIILRAMGKAYHPGCFTCVVCHRGLDGI
PFTVDATSQIHCIEDFHRKFAPRCSVCGGAIMPEPGQEETVRIVALDRSFHIGCYKCEECGLLLSSEGECCQGCYP
LDGHILCKACSAWRIQELSATVTTDC

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FIGURE 2325

GTCTTTTCCGGCCCCCGTGCACTCTCCGCCCCGAGCGGAGCCCCCGGCTCGCGGGGATCGCCCCGAGCGCTGCG
TCCTGCGGGTCACCTAACCCATTTGTGGCTTCCTCTACCTGTGCTCAGCCATGGCCAGCGAGAGCTCACCTCTGC
TGGCCTACCGGCTCCTGGGGGAGGAGGGGGTTGCCCTCCCTGCCAATGGGGCCGGGGGTCTGGAGGGGCGTCTG
CCCGGAAGCTGTCCACCTTCCTGGGTGTGGTGGTGCCCACTGTCTGTCCATGTTTACAGCATAGTTGTTTTCTGA
GGATTGGGTTTCGTGGTGGGTTCATGCTGGGCTACTGCAGGCCCTGGCCATGCTGCTGGTTCCTACTTCATCCTGG
CACTCACCGTCTCTCTGTCTGTGCCATCGCCACCAATGGAGCCGTGCAGGGGGGCGGAGCCTACTTCATGATCA
GCCGCACACTGGGGCCCCGAGGTGGGGGGCAGCATTGGGCTCATGTTCTACCTGGCTAACGTCTGTGGCTGTGCCG
TCTCCCTCCTGGGGCTGGTGGAGTCTGTGCTTGATGCTTCGGGGCCGATGCCACAGGGGCCAGTGGGCTCCGGG
TCCTGCCCCAGGGCTACGGCTGGAACCTGCTGTATGGCTCCCTGCTGCTGGGCCCTTGTTGGGTGGGGTCTGCACCC
TGGGAGCCGGCCTCTATGCCCGGGCCTCATTCTCACATTCCTGCTGGTCTCTGGCTCCCTGGCCTCTGTGCTCA
TCAGTTTTTGTGGCTGTGGGGCCGAGGGACATCCGCTTGACTCCTAGGCCTGGCCCCAATGGCTCCTCCCTGCCGC
CCCGGTTTTGGCCACTTCACCGGCTTCAACAGCAGTACCCTGAAGGACAACCTGGGCGCTGGCTATGCTGAGGACT
ACACCACGGGAGCCGTGATGAATTTGCCAGCGTCTTTGCTGTCCCTCTTAACGGCTGTACAGGCATCATGGCTG
GGGCCAACATGTACAGGGGAGCTGAAGGACCCAGCCGGGCGATCCCTCTGGGCACGATCGTCGCCGTGCGCTACA
CCTTCTTCGTCTATGTCTGCTTTTTCTTTCTCTCCAGCTTCACTTGTGACAGGACCCTGCTGCAGGAAGACTATG
GGTTCTTCCGCGCCATCAGCCTGTGGCCCCCACTGGTGTGATCGGAATCTATGCCACAGCGCTCTCAGCGTCCA
TGAGCTCGCTCATTGGTGCCTCCCGCATCCTCCATGCCCTGGCCCGGGATGACCTCTTTGGCGTGATCTTGGCAC
CGGCCAAGGTTGTGTCCCGAGGGGGAAACCCCTGGGCAGCTGTACTTTATTCTTGGGGCCTGGTGCAGCTGGTGC
TCCTGGCTGGGAAGCTGAACACACTGGCTGCTGTGGTCACTGTCTTACCTGGTGGCCTATGCTGCCGTGGACC
TGCTCTGCCTGAGCCTGGAGTGGGCCTCGGCCCCCACTTCGCCCCACCTTCAGCCTGTTCTCTGCGCACACCT
GCCTGCTGGGGGTGGCCTCCTGCCTGCTCATGATGTTCTCATAGTCCCTGGCGCGGCTGGTGGCTCCCTGCTCC
TCATGGGTCTGCTGGCTGCCCTGCTCACCGCGCGAGGAGGCCCCAGTAGCTGGGGCTATGTACGCCAGGCCTTGC
TTTTCCACCAGGTGCGTAAGTATCTGCTTCGGCTGGAGCTCCGGAAGGATCACGTGAAGTTCTGGCGGCCCCAGC
TGCTGCTCCTGGTGGGGAACCCCCGGGGCGCCCTGCTGCTGCGGTTGGCCAACCAGCTTAAGAAGGGGGGGG
TGATGTGCTGGGCCACGTACCCCTGGGAGACCTCGACTCCCTGCCCTCGGACCCTGTACAGCCGAGTATGGGG
CATGGCTCAGCCTGGTGGACCGTGCCAGGTGAAGGCTTTTGTGGATCTAACCTCTCACCCCTCGTGCGCCAGG
GGGCTCAGCATCTGCTGCGAATCTCCGGCCTCGGTGGCATGAAGCCCAACACGTTGGTCTAGGTTTCTACGATG
ACGCTCCACCGCAGGACCATTTCTGACGGACCCGGCTTTCTCTGAGCCTGCAGACAGCACCAGGGAGGGCAGTT
CCCCAGCTCTGAGCACCTGTTCCCTCCTCCCCGGGCTCCTGGGAGCCCCCGGGCCCTCAATCCCCAGGACTATG
TGGCCACGGTGGCCGACGCCCTCAAGATGAACAAGAATGTGGTGTGCGCCGGGCCAGCGGGGCCCTTGCCCCCTG
AGCGGCTGAGCCGGGGGTCTGGGGGCACCTCTCAGCTGCACCATGTGGACGTGTGGCCCTCAACCTGCTGCGGC
CCCCGGGTGGGCCCCGCTATGTGGATGTCTGCGGCCTCTTCTGCTGCAGATGGCAACCATCTTGGGCATGGTGC
CCGCTTGGCATAGCGCCCGGCTCCGGATCTTCTGTGCTGGGGCCTCGGGAGGCGCCTGGGGCGGCCGAGGGGC
GGCTGCGGGCACTGCTGAGCCAACCTGAGGATCCGGGCTGAGGTGCAGGAGGTGGTGTGGGGCGAGGGGGCCGGG
CTGGGGAACCCGAGGCGGAGGAGGAAGGGGACTTTGTGAACAGTGGGCGGGGAGACGCAGAGGCAGAGGCCCTGG
CACGCAGCGCCAACGCCCTGGTTCGGGCCCAGCAGGGGCGCGGCACAGGAGGAGGGCCGGGTGGGCCGAGGGTG
GGGATGCTGAGGGCCCCATCACAGCCCTACCTTCCTGTACTTGCCTCGGCCGCCAGCCGATCCCGCCCCGATACC
CCCCTACCTGGCGCTACTGGAGACTCTAACCCGAGACCTGGGCCCCACGCTGCTGGTTTATGGGGTCACTCCAG
TCACCTGCACTGATCTGTGATGCCCTGCCTCCAGGGCTAGGTAGAGAGGGCCAGGCAGGCGGCCTATCCTGAT
CCTTGGAGGAGGAGGAAGAGGAGGCCACTGTGGCCCGTGGCCCTGCCCTTGGGACGTGGAGCCAGGGGAGGTTT
GAAGGGGATCCTGGGCTTGGGCATCACGCCACCTCCTTTGGCAGAGGGACCCAGCACACTAACTCTGGGTGGC
TGTCCCCACCGTGCAGGGGAGGGAGTCCGCAGCCTCCCTTCACTGGTGCCTTGATGCTAGGGGCCAGGCCTCCTC
TGTGACTCTGGGCTACCTCAGTTTCCCATTTTGGCCAGACTACCGGCCCACTGGGGTGGTGTGTTTTCTGTT
TGTTTTATTTTTCTAACTCTGCTGACCATGAATAAAAGACCAAAACAC

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FIGURE 2326

GCGCGGGCAGGGCCGCACGAGCTGGCTGGCTGCTTGCACCCACATCCTTCTTTCTCTGGGACCTGGGGTCGCGGT
TACTTGGGCTGGCCGGCGAACCCTTGAGTGGCCTGGCGGGGAGCGGGCCTCGCGCGCCTGGAGGGCCCTGTGGAA
CGAAGAGAGGCACACAGCATGGCAGAAAACCGAGAGCCCCGCGGTGCTGTGGAGGCTGAACTGGATCCAGTGGAA
TACACCCCTTAGGAAAAGGCTTCCCAGCCGCTTGCCCCGGAGACCCAATGACATTTATGTCAACATGAAGACGGAC
TTTAAGGCCCAGCTGGCCCGCTGCCAGAAGCTGCTGGACGGAGGGGCCCGGGGTCAGAACGCGTGCTCTGAGATC
TACATTACGGCTTGGGCCCTGGCCATCAACCACGCCATCAACATCGCGCTGCAGCTGCAGGCGGGCAGCTTCGGG
TCCTTGCAAGTGGCTGCCAATACCTCCACCGTGGAGCTTGTTGATGAGCTGGAGCCAGAGACCGACACAAGGGAG
CCACTGACTCGGATCCGCAACAACCTCAGCCATCCACATCCGAGTCTTCAGGGTCACACCCAAGTTAATTGAAAAGA
CACTCCTCCACTTATCCCCTCCGTGATATGGCTCTTCGCATGCTGAGTACTGGACCTCGGACCAGAGCCATGTAA
GAAAAGGCCTGTTCCCTGGAAGCCCAAAGGACTCTGCATTGAGGGTGGGGGTAAATTGTCTCTTGGTGGCCCAGTT
AGTGGGCCTTCCTGAGTGTGTGTATGCGGTCTGTAACATTGCCATATAAATAAAAAATCCTGTTGCACTAGTGT
CCTGCCAAA

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FIGURE 2327

MAENREPRGAVEAELDPVEYTLRKRLPSRLPRRPNDIYVNMKTDFKAQLARCQKLLDGGARGQNACSEIYIHGLG
LAINHAINIALQLQAGSFGSLQVAANTSTVELVDELEPETDTREPLTRIRNNSAIHIRVFRVTPK

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FIGURE 2328

GGAGGAAGACAGCGCCGCCGCGCACCGCCAGCGACCTCCGCCGAGAGTCCCACCGCCACAGGCCTCGGGCCAG
CGGCCAGGAGCTGCCTCCCCAGCCCCGTCCCGCGGCCCCAGCCGCCCCCAACCTGCCCCACGGGCCCCGGCG
CCATGAGTGAGCTGGAGCAACTGAGACAGGAGGCCGAGCAGCTCCGGAACCAGATCCGGGATGCCCCGAAAAGCAT
GTGGGGACTCAACACTGACCCAGATCACAGCTGGGCTGGACCCAGTGGGGAGAATCCAGATGAGGACCCGGAGGA
CCCTCCGTGGGCACCTGGCAAAGATCTATGCCATGCACTGGGGGACCGACTCAAGGCTGCTGGTCAGCGCCTCCC
AGGATGGGAAGCTCATCATCTGGGACAGCTACACCACCAACAAGGTCCACGCCATCCCGCTGCGCTCCTCCTGGG
TAATGACCTGTGCCTACGCGCCCTCAGGGAACCTTTGTGGCCTGTGGGGGGTTGGACAACATCTGCTCCATCTACA
GCCTCAAGACCCGCGAGGGCAACGTCAGGGTCAGCCGGGAGCTGCCTGGCCACACTGGGTACCTGTGCTGTTGCC
GCTTCCTGGATGACAACCAATCATCACCAGCTCTGGGGATACCACCTGTGCCCTGTGGGACATTGAGACAGGCC
AGCAGACAGTGGGTTTTGCTGGACACAGTGGGGATGTGATGTCCCTGTCCCTGGCCCCGATGGCCGCACGTTTG
TGTCAGGCGCCTGTGATGCCTCTATCAAGCTGTGGGACGTGCGGGATTCCATGTGCCGACAGACCTTCATCGGCC
ATGAATCCGACATCAATGCAGTGGCTTTCTTCCCCAACGGCTACGCCTTCACCACCGGCTCTGACGACGCCACGT
GCCGCCTCTTCGACCTGCGGGCCGATCAGGAGCTCCTCATGTACTCCCATGACAACATCATCTGTGGCATCACCT
CTGTTGCCTTCTCGCGCAGCGGACGGCTGCTGCTCGCTGGCTACGACGACTTCAACTGCAACATCTGGGATGCCA
TGAAGGGCGACCGTGACAGGAGTCTCGCTGGCCACGACAACCGCGTGAGCTGCCTCGGGGTACCGACGATGGCA
TGGCTGTGGCCACGGGCTCCTGGGACTCCTTCTCAAGATCTGGAATAATGGCCCCACCCCACTGGGCCCAGG
CCAGGAGGGGCCCTGCCCATGCCACACTACAGGCCAGGGCTGCGGGGCTGGCGCAATCCCAGCCCCCTTCCCCG
GGCCACGGGGCCTTGGGTCCCTGCCCTCCCACCCAGGTTTGGTTTCTCCCGGGGGCCCCACTGTGGAGATAAGAA
GGGGATGGAATGGGGGAAGAGGAGGAGCAGGAGGCCCTCATCCTTCTGCTGCCCTGGGGTTGGGGCCTACCCCT
CTGGAGGGCCGGAGGCAGGAGGTGGAAACCCAGGGGCTGGCTTTTTTAAACTGGTTTTATTTTAAATTTTTATT
ATATTTTCAGTTTTTCCATAAAGGAGCCAATTCCAACCTCTGT

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FIGURE 2329

ATCCTGCTGCTGCCGCCACCGCTGCTGCTGCTCTGCAAAATTAGCTGCTGCCTCTGTCTTGAGGACCCCAGCGC
CTTTCCCCCGGGGCCATGCTGCCTGCAGCCACAGCCTCCCTCCTGGGGCCCCCTCCTCACTGCCTGCGCCCTGCTG
CCTTTTGCCAGGGCCAGACCCCCAACTACACCAGACCCGTGTTCCTGTGCGGAGGGGATGTGAAGGGGAATCA
GGTTACGTGGCAAGTGAGGGGTTCCCCAACCTCTACCCCCCTAATAAGGAGTGCATCTGGACCATAACGGTCCCC
GAGGGCCAGACTGTGTCCCTCTCATTCCGAGTCTTCGACCTGGAGCTGCACCCCGCCTGCCGCTACGATGCTCTG
GAGGTCTTCGCTGGGTCTGGGACTTCCGGCCAGCGGCTCGGACGCTTTTGTGGGACCTTCCGGCCTGCGCCCCCTA
GTCGCCCCCGGCAACCAGGTGACCCTGAGGATGACGACGGATGAGGGCACAGGAGGACGAGGCTTCTGCTCTGG
TACAGCGGGCGGGCCACCTCGGGCACTGAGCACCAATTTTTCGGGGGGCGGCTGGAGAAGGGCCAGGGAACCCCTG
ACCACGCCCCAACTGGCCCGAGTCCGATTACCCCCCGGGCATCAGCTGTTCCCTGGCACATCATCGCGCCCCCGGAC
CAGGTATCGCGCTGACCTTCGAGAAGTTTGACCTGGAGCCGGACACCTACTGCCGCTATGACTCGGTGAGCGTG
TTCAACGGAGCCGTGAGCGACGACTCCCGGAGGCTGGGGAAGTTCTGCGGCGACGCAGTCCCGGGCTCCATCTCC
TCCGAAGGGAATGAACCTCCTCGTCCAGTTTCGTCTCAGATCTCAGTGTACCGCTGATGGCTTCTCAGCCTCCTAC
AAGACCCTGCCGCGGGGCACTGCCAAAGAAGGGCAAGGGCCCGGCCCCAAACGGGGAACTGAGCCTAAAGTCAAG
CTGCCCCCAAGTCCCAACCTCCGGAGAAAACAGAGGAATCTCCTTCAGCCCCCTGATGCACCCACCTGCCCAAAG
CAGTGCCGCGGACAGGCACCTTGACAGCAACTTCTGTGCCAGCAGCCTTGTGGTGACTGCGACAGTGAAGTCC
ATGGTTTCGGGAGCCAGGGGAGGGCCTTGCCGTGACTGTCAGTCTTATTGGTGCTTATAAACTGGAGGACTGGAC
CTGCCTTCTCCACCCACTGGTGCCTCCCTGAAGTTTTACGTGCCTTGCAAGCAGTGCCCCCATGAAGAAAGGA
GTCAGTTATCTGCTGATGGGCCAGGTAGAAGAGAACAGAGGCCCGTCTCCTCCAGAGAGCTTGTGGTTCTC
CACCGGCCCAACCAGGACCAGATCCTCACCAACCTAAGCAAGAGGAAGTGCCCTCTCAACCTGTGCGGGCTGCT
GCGTCCCAGGACTGAGACGCAGGCCAGCCCCGGCCCCCTAGCCCTCAGGCCTTCTTTCTTATCCAAATAAATGTTT
CTTAATGA

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FIGURE 2330

MLPAATASLLGPLL TACALLPFAQGQTPNYTRPVFLCGGDVKGESGYVASEGFNLYPPNKECIWTITVPEGQTV
SLSFRVFDLELHPACRYDALEV FAGSGTSGQRLGRFCGTFRPAPLVAPGNQVTLRMTTDEGTGGRGFLWYSGRA
TSGTEHQFCGGRLEKAQGTLTTPNWPESDYPPGISCSWHIIAPPDQVIALTFEKFDLEPD TYCRYDSVSVFNGAV
SDDSRRLGKF CGDAVPGSISSEGNELLVQFVSDLSVTADGFSASYKTLPRGTAK EGQGP GPKRGTEPKVKLP PKS
QPPEKTEESPSAPDAPTC PKQCRRTGTLQSNFCASSLVVTATVKSMVREPGEGLAVTVSLIGAYKTGGDLPSPP
TGASLKFYVPCKQCP PMKKGVSYLLMGQVEENRGPVLPPE SFVVLHRPNQDQILTNLSKRKCPSQPVRAAASQD

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FIGURE 2331

GGAGAGGCAGAGACCCAGGGGAGCCGAGGAGCGGAGACACGGACCCAGCAGGGTCACGCGGGAGGAGACTCGGGA
 CACCCACTCGCTGGCTGCCACCGGGAGCAGAGGGGGGCTCGGCCGCCCTCCCACATCAGTCTCCAGACCCCTG
 GGGCTTCAGAGGCCGCTCCTAGGCTCCTCGGAGGAGGCGCGGGTTTCTTCTTTCCGGAGAGCAAACCTTCTCG
 GAGATGCCTGGCAGGATGAGCCGCGGCCCGCGGAGAGGACGGGACAGCCTCTGATCGCCGCTGCGTGCCCCGCC
 ACTGCCCATGGCCAGGAGGCCCCAGGGAACGGACAGCCCGACCTCTTAGGCGCCGGGACCCTCAGGCTCAGATCA
 GTGGCCGAGGGCCCCAGAGTTTGCAAACCTCAGCTCTGGAGTTCAGCAGCAACAGCAGCAGGAAAAACCTGCCCCCTG
 CTCCCCCTCCCGCCACCTCCCTCTCCTCTTCTCCCTCACCCAGCAGGCACCCCGGTTCCCGCCAGGGCCCTC
 CTGCCATGTGCGACCCAGACGTCCCCAGGGGCTCGGATGTCCCCGCCATGTGGCCCCCTTGTTCCAGGGGTGCTT
 GAGCCCCCTTCAAGGAGCCCCAACCCACCCCAACCTTGCCCCAGCCCTGAGCCCCAGGGACCATGAGCGGGGGCA
 AGAAGAAGAGTAGTTTCAAATCACCAGCGTCACCACGGACTATGAGGGCCCTGGGAGCCCCAGGGGCTTCGGATC
 CCCCTACCCACAGCCCCAACCGGGCCCCCGCCCCGCTGCCCAATGGGGAGCCCAGCCCCGATCCGGGGGGCA
 AGGGCACCCCCCGAATGGCTCCCCACCACCTGGGGCCCCCTTCTCCCGTTTCCGGGTGGTGAAGTGCCCCACG
 GCCTGGGAGAGCCTTATCGCCGCGGTGCTGAGCGTGTGTGGATGTTTATGAGCGAGACCTGGAGCCCCACAGCT
 TCGGCGGACTCCTGGAGGGAATTGAGGGGCTCAGGGGGCGCCGGGGGCGAGATCTTGGATTCCAGGTTGGAGC
 TGGCCAGCCTCGGCCTGGGCGCCCCACCCACCGTCAGGCCTGTCTCAGGGCCCCACCTCCTGGCTCCGTCCAC
 CCCCCACCTCTCCTGGACCTCAGGCCCGCTCCTTCACTGGGGGACTGGGCCAGCTGGTGGTGCCAGCAAAGCCA
 AGGCAGAGAAACCCCCACTGTGCGCCTCCTCACCCAGCAGCGCCCCCAGAGCCTGAGACCGGTGAGAGTGCGG
 GCACATCCCGGGCTGCCACGCCCTGCCCTCTCTGAGGGTGGAAGCGGAGGCTGGGGGCTCAGGGGCCAGGACCC
 CTCCACTGTCCCGGAGGAAAGCTGTAGACATGCGGCTGCGGATGGAGTTGGGTGCTCCAGAAGAGATGGGGCAGG
 TGCCCCCACTTGACTCTCGCCCCAGCTCCCCAGCCCTCTACTTCACCCACGATGCCAGCCTGGTTCACAAATCTC
 CAGACCCCTTCGGAGCAGTAGCAGCTCAGAAGTTCAGCCTGGCCCACTCCATGTTGGCCATCAGTGGTCACCTAG
 ACAGCGACGATGATAGTGGCTCCGGAAGCCTGGTTGGCATTGACAACAAAATCGAGCAAGCCATGGACTTGTTGA
 AGTCCACCTCATGTTTGCGGTCCGGGAGGAGGTGGAGGTGCTGAAGGAGCAGATCCGGGAACCTGGCGGAGCGGA
 ACGCTGCGCTGGAGCAGGAGAATGGGCTGCTGCGCGCCCTGGCCAGCCCGGAGCAGCTGGCTCAGTGCCCTCCT
 CGGGGGTCCCACGGCTTGGGCCCCCTGCGCCCAATGGGCCCTCCGTCTGAGCCTCCCTTCCCTTACAAATGTGCCT
 TTGGGGCTGCCCCGCCCTTGCGTCAGCCGCCTGCCCCCTCTTCTATGCAGCTTTAATGTCCCCGTGTCCCCGGG
 TGGGAGTTCAAGGCTCAGTAATGGCCTGGTCCCCCGCCCCCTGCCCATCTCCTCATCATCCCCAGCCTTGATGG
 AGGAGGGAGGGCTTCAGGACGGGGCGTCAGAGGGAGGCCCTCTGGGAGGGAACCAACCCCCACCCTCCCTCCTG
 GGACCCCCCAGCAGTAGACGGCTTGGGGGAGTCGGAGGCTCCCCGGCAGACACCCACCCCCATCTTGTTCCCTT
 GAGGTGCCTCCTCTCCTCTGCCAGGGGAGGGAGTGTGGACAGTATCTGGAAGTTCTGGGATTGAGGTTGTTATT
 AAAATAATAATAATAATTAAAACTCTGAAGAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2332

MSGGKKKSSFQITSVTTDYEGPGSPGASDPPTPQPPTGPPRLPNGEPSDPGGKGTPRNGSPPPGAPSSRFRVV
KLPHGLGEPYRRGRWTCVDVYERDLEPHSFGLLEGIRGASGGAGGRSLDSRLELASLGLGAPTPPSGLSQGPTS
WLRPPPTSPGPQARSFTGGLGQLVVPSKAKAEKPPLSASSPQQRPEPETGESAGTSRAATPLPSLRVEAEAGGS
GARTPPLSRRKAVDMRLRMELGAPEEMGQVPPPLDSRPSSPALYFTHDASLVHKSPDPFGAVAAQKFSLAHSMIAI
SGHLDSDDDSGSGSLVGIDNKIEQAMD LVKSHLMFAVREEVEVLKEQIRELAERNAALEQENGLLRALASPEQLA
QLPSSGVPRLGPPAPNGPSV

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FIGURE 2333

ATTAACTCCAGAGCCGTTAAGTTGGTTTCGTAGTCTGATGCGCGCGCAACCAGGGTGGTGGCGGAGTGCGCAT
GCGTGGTTCCGGGGCGAAGGGAACGCGCGCTCACCGTGCGCGCTCGCGGCCGGGTGGTAGTGGCGGAGGAGAAAG
GGGTCCGGCGCACGCGCGGTTGAGTCCTCGAGTAGTTCCGGTCTCGCGGGCCTCTTGTGTTTGGTCTCGCGGGCTAG
TAGGGCGCACTTGGCGGGGAGGCGCTTGGGCGCGAGACTAGGCGTGAAGAGCAGAGCTGCGCGCGCACTCGGGAA
AGGGGGGAAGGGAGCAGGGTCCAGGCAGGGGGGGTTAGGCCCCCTGATCCCCCTCGTTACCCCGACTGGCACGGA
ATAAGGGGAGGAAATGATCGAGATGGCGGCGGAGAAGGAGCCGTTTCTGGTGCCGGCCCCGCCGCCGCTCAA
AGATGAGTGGGGCGAGGGGGCGGCCCCACGGTGCCACCGCACCAAGAGGCCGCTCTGGGGAGCTCCGCGGCGG
GACGGAGCGTGGTCCGGGTCGTTGCGCGCCATCTGCGGGGTCCCCAGCCGCTGCGGTGCGTGGGAAAGCCCCGG
GGCCGCGGCCACCTCCTCCAGTGGTCCCCAGGCGCAGCAGCACCAGGGGGGCGGCCCCCAGGCGCAGTCGCATGG
GGAGGCCCCGCTGTGCGATCCCCGGGGCGAGCCGCTCCCCCGACGTGGGGGAGGAGCGCCGGGGAGGGGGCGG
GACAGAGCTGGGTCCCCCTGCTCCTCCTCGACCCCGCAATGGCTATCAGCCCCACCGGCCACCTGGGGGGGGCGG
GGGCAAGAGGAGAAATAGCTGTAATGTAGGGGGAGGCGGGGGAGGCTTCAAACATCCGGCCTTCAAGAGGCGCAG
GCGGGTGAATTTCGGA CTGTGACTCTGTGTTACCTTCCAATTCTCCTGGGGGGCAATATCTTTGATCCCTGAA
CCTGAATAGCCTCCTGGATGAGGAAGTGAGCCGCACTCTCAACGCGGAGACCCCTAAGTCATCCCCCTTCCGGC
CAAAGGGCGAGATCCGGTGGAGATCCTCATCCCCAAAGATATTACTGACCCGCTCAGTCTCAATACTTGCACTGA
TGAGGGCCATGTAGTTCTTGCTTCGCCACTCAAGACTGGTCGGAAGCGGCATAGACACCGGGGACAGCACCACCA
GCAGCAGCAGGCAGCCGGAGGGAGTGAGAGCCACCCCGTGCCGCCACAGCCCTCTCACCCCTTACTCCACGG
GGAGGGCGCCTCACAGCAGCCGCGGCACAGGGGCCAGAACC GGATGCCCCCAACCCTATGAACCTCAACACAGC
CATCAACTGCAGGGATGAAGTGGTGTCTCCCTTCCATCTGCTCTGCAGGGTCCCTCAGGCTCCCTATCAGCCC
TCCAGCTGCCTCAGTTATCTCTGCACCCCCATCTTCTCCTCCCGACATCGCAAACGTCGCAAGGACTTCCAGCAA
GTGCGAGGCAGGGGCTAGGGGTGGAGGCCAGGGTTCCAAGGAAAAGGGCCGAGGGAGTTGGGGAGGCCGCCACCA
CCACCACCACCCACTGCCTGCAGCAGGCTTCAAAAAGCAACAGCGCAAGTTCCAGTATGGGAATTATTGCAAATA
CTATGGGTACCGCAATCCTTCTGTGAGGATGGGCGCCTTCGGGTGTTGAAGCCTGAGTGGTTTCGGGGCCGGGA
CGTCTAGATCTGGGCTGCAATGTGGGCCATCTGACCTTGAGCATTGCCTGCAAGTGGGGCCCGTCCCGCATGGT
GGGCTGGATATCGAATCCCGGCTCATCCATTCTGCCCGCCAAAACATCCGACACTACCTTTCCGAGGAGCTGCG
TCTCCACCCCAAGCTTTGGAAGGGGACCCGGGGGCGAGGGGTGAGGAAGGGACCACCACCGTTTCAAAGAGGAG
CTGCTTCCAGCCTCGCTGACTGCCAGCCGGGTCCCATCGCTGCCCCCAAGTGCCCTTGGATGGAGCGGACAC
ATCAGTCTTCCCCAACAAATGTTGTCTTCGTACGGGTAAATTATGTGCTGGATCGAGATGACCTGGTGGAGGCCA
AACACCTGAGTATGATGTGGTGTCTGCCTCAGCCTCACCAAGTGGGTGCATCTGAACCTGGGGAGACGAGGGCCT
GAAGCGCATGTTTCGCCGGATCTACCGGCACCTACGCCCTGGGGGCATCCTGGTCTAGAGCCCCAACCCCTGGTC
GTCGTATGGCAAGAGAAAGACTCTTACAGAAACGATCTACAAGAACTACTACCGAATCCAATTGAAGCCAGAGCA
GTTCAAGTCTTACCTGACATCCCCAGACGTGGGCTTCTCCAGCTATGAGCTTGTGGCCACACCCACAAACCTC
TAAAGGCTTCCAGCGTCTGTGTACCTGTTCCACAAGGCCCGATCCCCAGCCACTAAGTGGCCCCCTAAACAGA
AAGTGTGAAGAGGCTGCCCTCGCTGCTCATAAGGACCTGGGGGAAGAGGAAAGTGTCCCAAGGTCTTTCTTTCT
GACTCCAAAAATAGTTTCTTTCTTGGATCTGCAAAGAAAGCTTTTCTTCCGTGCTGCCTCAGCCTCCTCCCTA
TGCTCTGGCACCTGCGCAGCAAGGCTGGCTGTGCTGGAGTCACCATCATCTTCTCTCCCCAGCCTCCCAGGC
TGGATGGCATGGACTGTTTGCTGACCTCTGTTCTCTTAGGGCATGGGAGGTGGGAGGATATCAAATTCTCTAGCC
CTTTCTCTCTATTCTCTAGCCCTTCTATTCTCCCAAGGAGAGAGATTCCCATTTCTCTCGGCCATTGTACCTAG
CTCTTGTCCCTAGCTGCATTTTCAAGTGGACCATGGATAGAGGGACTGAGGGTTAGACGGAGAAGACTGGCAGGGAG
GCACGCAGGTACTGTGAAAAATCCTTCCCTTTGCCCTCCCCAGTGGGAGAGGGGGTGGGTTTTCAATGTGAGAA
CAGCACAAATAAATTGATGTCTAGGGCAGTGGCCCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAA

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FIGURE 2334

MVGLDIDSRLIHSARQNI RHYLSEELRLPPQTLEGDPGAEGEEGTTTVRKRS CF PASLTASRGPIAAPQVPLDGA
DTSVFPNNVVFVTGNYVLD RDDLVEAQTPEYDVVLCLSLTKWVHLN WGDEGLKRMFRR IYRHLP GGILVLEPQP
WSSYGKRKTLTETIYKNYRIQLKPEQFSSYL TSPDVGFSSYELVATPHNTSKGFQRPVYLFHKARSPSH

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FIGURE 2335

GGCACGAGGGGAAGTGGCTGTTTGGCTGCTGACAACATGAAGACTTCCTGCGATGAGAACAGAGGCACAGGTGCC
GGCCCTGCAGCCCCCAGAACCTGGACTGGAGGGGGCCATGGGGCACCAGGACCCTGGTCCTGCCCTGGGTGCTGCT
GACCTTGTGTGTCACTGCGGGGACCCCGAGGTGTGGGTTCAAGTTCCGGATGGAGGCCACCGAGCTCTCGTCCTT
CACCATCCGTTGTGGGTTCCCTGGGGTCTGGCTCCATCTCCCTGGTGACTGTGAGCTGGGGGGGCCCCGACGGTGC
TGGGGGGACCACGCTGGCTGTGTTGCACCCAGAACGTGGCATCCGGCAATGGGCCCCCTGCTCGCCAGGCCCGCTG
GGAAACCCAGAGCAGCATCTCTCTCATCTGGAAGGCTCTGGGGCCAGCAGCCCCCTGCGCCAACACCACCTTCTG
CTGCAAGTTTGCCTCTCCCTGAGGGCTCCTGGGAGGCCTGTGGGAGCCCTCCCGCCCAGCTCAGACCCAGGGCT
CTCTGCCCCGCCGACTCCTGCCCCATTCTGCGGGCAGACCTGGCCGGGATCTTGGGGGTCTCAGGAGTCCTCCT
CTTTGGCTGTGTCTACCTCCTTCATCTGCTGCGCCGACATAAGCACCAGCCCTGCCCCTAGGCTCCAGCCGTCCCG
CACCAGCCCCCAGGCACCGAGAGCACGAGCATGGGCACCAAGCCAGGCCTCCCAGGCTGCTCTTCACGTCCCTTA
TGCCACTATCAACACCAGCTGCCGCCAGCTACTTTGGACACAGCTCACCCCCATGGGGGGCCGTCTGGTGGGC
GTCACCTCCCCACCCACGCTGCACACCGGGCCCCAGGGCCCTGCCGCCTGGGCCTCCACACCCATCCCTGCACGTGG
CAGCTTTGTCTCTGTTGAGAAATGGACTCTACGCTCAGGCAGGGGAGAGGCCTCCTCACACTGGTCCCGGCCTCAC
TCTTTTCCCTGACCCCTCGGGGGCCAGGGCCATGGAAGGACCCTTAGGAGTTCGATGAGAGAGACCATGAGGCCA
CTGGGCTTTCCCCCTCCCAGGCCTCCTGGGTGTCATCCCCTTACTTTAATCTTGGGCCTCCAATAAGTGTCCCA
TAGGTGTCTGGCCAGGCCACCTGCTGCGGATGTGGTCTGTGTGCGTGTGTGGGCACAGGTGTGAGTGTGTGAGT
GACAGTTACCCCATTCAGTCATTTCTGCTGCAACTAAGTCAGCAACACAGTTTCTCTGAAAAAAAAAAAAAA
AAAA

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FIGURE 2336

MRTEAQVPALQPPEPGLEGAMGHRTLVLWPVLLTLCVTAGTPEVWVQVRMEATELSSFTIRCGFLGSGSISLVTV
SWGGPDGAGGTTLAVLHPERGIRQWAPARQARWETQSSISLILEGSGASSPCANTTFCKKFASFPEGSWEACGSL
PPSSDPGLSAPPTPAPILRADLAGILGVSGVLLFGCVYLLHLLRRHKHRPAPRLQPSRTSPQAPRARAWAPSQAS
QAALHVPYATINTSCRPATLDTAHPHGGPSWWASLPTAAHRPQGPAAWASTPIPARGSFVSVENGLYAQAGERP
PHTGPGLTLFPDPRGPRAMEGPLGVR

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FIGURE 2337

AAGGGTCTAGGATACAGTCTTTGTAGATGAGCGGGTCCCCCTTGGAGGACAGAATGAAGAATTGGGAAATCATGG
CCGTTCTGGAGAGTAGACAAGAAGACGGCGAAAGTCGGGGCTGCCCCGCCCTGCGGCCCCGGAACAAAAGAACGC
GTGTGCGCTGGCCCTTTAAGAGCGATTCTCCTCCGCCCGCGCCAGCTCGGACCGCGGGAAACCCGGCGCCTGCAC
TACCCCGCCCCGAGATTCCCTTCCGACGCCCGCACCGCCTCCCCGTCACTCATTCTAGGCCCCGACGGTGATTGG
CTTGCGGCTAGCGGGAGGTGAAGAAGGCCGCTTGTCCGATTGGCCCCGACGACGAGTGCGGCCGGTACAGTGGGGG
GCGACGTTTTCGCGCCAATTTGCGTTGGCCGGCCACAGTCCACCGCGCGGAGATTCTCAGCTTCCCCAGGAGCAAG
ACCTCTGAGCCCCGCAAGCGCGGCCGACGGCCCTCGGCAGCGATGGCACTGAAGGACTACGCGCTAGAGAAGGA
AAAGGTTAAGAAGTTCTTACAAGAGTTCTACCAGGATGATGAACTCGGGAAGAAGCAGTTCAAGTATGGGAACCA
GTTGGTTCCGGCTGGCTCATCGGGAACAGGTGGCTCTGTATGTGGACCTGGACGACGTAGCCGAGGATGACCCCGA
GTTGGTGGACTCAATTTGTGAGAATGCCAGGCGCTACGCGAAGCTCTTTGCTGATGCCGTACAAGAGCTGCTGCC
TCAGTACAAGGAGAGGGAAGTGGTAAATAAAGATGTCCTGGACGTTTACATTGAGCATCGGCTAATGATGGAGCA
GCGGAGTCGGGACCCCTGGGATGGTCCGAAGCCCCAGAACCCAGTACCCTGCTGAACTCATGCGCAGATTGTGAGT
GGTCTCTGTCGGGAAAGATGTAGGGATTGGTCTCCAGGATCTTGTGTTGTGACTGTTTTCTCCCTTAGTGAGCT
GTATTTTCAAGGCCCTAGCAGCAACAAGCCTCGTGTGATCCGGGAAGTGCGGGCTGACTCTGTGGGGAAGTTGGT
AAGTGTGCGTGGAATCGTCACTCGTGTCTCTGAAGTCAAACCCAGATGGTGGTGGCCACTTACACTTGTGACCA
GTGTGGGGCAGAGACCTACCAGCCGATCCAGTCTCCACTTTCATGCCTCTGATCATGTGCCAAGCCAGGAGTG
CCAAACCAACCGCTCAGGAGGGCGGCTGTATCTGCAGACACGGGGCTCCAGATTCAATAATTCCAGGAGATGAA
GATGCAAGAACATAGTGATCAGGTGCCGTGTGGGAAATATCCCTCGTAGTATCACGGTGCTGGTAGAAGGAGAGAA
CACAAGGATTGCCAGCCTGGAGACCAGTCAAGCTCACTGGTATTTTCTTGCCAATCCTGCGCACTGGGTTCGG
ACAGGTGGTACAGGGTTTACTCTCAGAAACCTACCTGGAAGCCCATCGGATTGTGAAGATGAACAAGAGTGAGGA
TGATGAGTCTGGGGCTGGAGAGCTCACCAGGGAGGAGCTGAGGCAAAATGCAGAGGAGGATTTCTACGAAAAGCT
GGCAGCTTCAATCGCCCCAGAAATATACGGGCATGAAGATGTGAAGAAGGCACTGCTGCTCCTGCTAGTCGGGGG
TGTGGACAGTCTCCTCGAGGCATGAAAATCCGGGGCAACATCAACATCTGTCTGATGGGGGATCCTGGTGTGGC
CAAGTCTCAGCTCCTGTCTACATTGATCGACTGGCGCCTCGCAGCCAGTACACAACAGGCCGGGGCTCCTCAGG
AGTGGGGCTTACGGCAGCTGTGCTGAGAGACTCCGTGAGTGGAGAAGTACCTTAGAGGGTGGGGCCCTGGTGCT
GGCTGACCAGGGTGTGTGCTGCATTGATGAGTTCGACAAGATGGCTGAGGCCGACCGCACAGCCATCCACGAGGT
CATGGAGCAGCAGACCATCTCCATTGCCAAGGCCGGCATTCTCACCACACTCAATGCCCCGCTGCTCCATCCTGGC
TGCCGCCAACCCTGCCCTACGGGCGCTACAACCCTCGCCGACGCTGGAGCAGAACATACAGCTACCTGCTGCACT
GCTCTCCCGGTTTTGACCTCCTCTGGCTGATTCAAGGACCGGCCCGACCGAGACAATGACCTACGGTTGGCCAGCA
CATCACCTATGTGCACCAGCACAGCCGGCAGCCCCCTCCAGTTTGAACCTCTGGACATGAAGCTCATGAGGCG
TTACATAGCCATGTGCCGCGAGAAGCAGCCCATGGTGCCAGAGTCTCTGGCTGACTACATCACAGCAGCATACTG
GGAGATGAGGCGAGAGGCTTGGGCTAGTAAGGATGCCACCTATACTTCTGCCCCGACCCCTGCTGGCTATCCTGCG
CCTTTCCACTGCTCTGGCACGTCTGAGAATGGTGGATGTGGTGGAGAAAGAAGATGTGAATGAAGCCATCAGGCT
AATGGAGATGTCAAAGGACTCTCTTCTAGGAGACAAGGGGCAGACAGCTAGGACTCAGAGACCAGCAGATGTGAT
ATTTGCCACCGTCCGTGAAGTGGTCTCAGGGGGCCGAAGTGTCCGGTCTCTGAGGCAGAGCAGCGCTGTGTATC
TCGTGGCTTACACCCCGCCAGTTCCAGGCGGCTCTGGATGAATATGAGGAGCTCAATGTCTGGCAGGTCAATGC
TTCCCGGACACGGATCACTTTTGTCTGATTCCAGCCTGCTTGCAACCCTGGGGTCTCTGTTCCCTGCTGGCCT
GCCCCCTGGGAAGGGGCAGTGATGCCTTTGAGGGGAAGGAGGAGCCCCCTCTTTCTCCCATGCTGCACTTACTCCT
TTTGCTAATAAAAGTGTGTGTAGATTGTCTCTTAGCCTGGGCCTGACTTCCATTAAACAGGGTTTTGTGCG
TTTTTTAGATTCTGTTCGTTTTTATGCTATTTTATCCACTCAGTAAATTACCTGAGTAAAGTGCATCTCCCTGC
CAGGCCCCAGTATAGACACTGGGGATGCGGCAAGGACTAAGCGGTCCCTGCTGTTTGGAGATACTTAAGATGGG
GCTCCACTTTTTGAGCCCCCGACTCCCT

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FIGURE 2338

GGCACGAGGGGAAAATGGCGGCGGCGGCGGCGGCGGCTGCAGCTACGAACGGGACCGGAGGAAGCAGCGGGATGG
AGGTGGATGCAGCAGTAGTCCCCAGCGTGATGGCCTGCGGAGTGACTGGGAGTGTTTCCGTCGCTCTCCATCCCC
TTGTCATTCTCAACATCTCAGACCACTGGATCCGCATGCGCTCCCAGGAGGGGCGGCCTGTGCAGGTGATTGGGG
CTCTGATTGGCAAGCAGGAGGGCCGAAATATCGAGGTGATGAACTCCTTTGAGCTGCTGTCCCACACCGTGGAAG
AGAAGATTATCATTGACAAGGAATATTATTACACCAAGGAGGAGCAGTTTAAACAGGTGTTCAAGGAGCTGGAGT
TTCTGGGTTGGTATACCACAGGGGGGCCACCTGACCCCTCGGACATCCACGTCCATAAGCAGGTGTGTGAGATCA
TCGAGAGCCCCCTCTTTCTGAAGTTGAACCCCTATGACCAAGCACACAGATCTTCTGTGACGCTTTTTGAGTCTG
TCATTGATATAATCAATGGAGAGGCCACAATGCTGTTTGCTGAGCTGACCTACACTCTGGCCACAGAGGAAGCGG
AACGCATTGGTGTAGACCACGTAGCCCGAATGACAGCAACAGGCAGTGGAGAGAACTCCACTGTGGCTGAACACC
TGATAGCACAGCACAGCGCCATCAAGATGCTGCACAGCCGCGTCAAGCTCATCTTGGAGTACGTCAAGGCCTCTG
AAGCGGGAGAGGTCCCCCTTAATCATGAGATCCTGCGGGAGGCCTATGCTCTGTGTCACTGTCTCCCGGTGCTCA
GCACAGACAAGTTCAAGACAGATTTTTATGATCAATGCAACGACGTGGGGCTCATGGCCTACCTCGGCACCATCA
CCAAAACGTGCAACACCATGAACCAGTTTGTGAACAAGTTCAATGTCCTCTACGACCGACAAGGCATCGGCAGGA
GAATGCGCGGGCTCTTTTTCTGATGAGGGTACTTGAAGGGCTGATGGACAGGGGTGAGGCAACTATCCCAAAGGG
GAGGGCACTACACTTCCTTGAGAGAAACCGCTGTCATTAATAAAAGGGGAGCAGCCCCTGAGCACCAAAAAAAA
AAAAAAAAAAAAAAAAAAAAA

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FIGURE 2339

MACGVTGSVSVALHPLVILNISDHWIRMRSQEGRPVQVIGALIGKQEGRNIEVMNSFELLSHTVEEKIIDKEYY
YTKEEQFKQVFKELEFLGWYTTGGPPDPSDIHVHKQVCEIIESPLFLKLNPMTKHTDLPVSVFESVIDIINGEAT
MLFAELTYTLATEEAERIGVDHVARMTATGSGENSTVAEHLIAQHSAIKMLHSRVKLILEYVKASEAGEVPFNHE
ILREAYALCHCLPVLSTDKFKTDFYDQCNDVGLMAYLGTITKTCNTMNQFVNKFNVLYDRQGIGRRMRGLFF

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FIGURE 2340

GCTTCCGGCACGGGATGTTTTCGGTTGTTTGACCGAGAGAGTTGTAGGCGCAAAGCTGAGGAAAGGAGAGTGTGG
AGAGGGGCTTGGTGTGGTGGGGCCCGGTGTTTGGGACCGGAGGGTGTGACGGCTGATGAGTTCCCTTGGGTTTGC
TCTTTCTTCACCTGAAAAGAAGACTCCAGGAAGGGCAGCACATGCCGAGAAAAGATGAATTGCAGCTTGACCGCC
CAGAGGCGCGGCAGTGACGCCGAGTTGGGACCCTGGGTGATGGCTGCGAGGTCCAAGGACGCGGCGCCGTCCCAA
CGCGACGGACTTTTGGCCGTGAAAGTGAGGAAGACTCACCCGGAAGTTGGGAGCCCAACTATCCCGCGGCTTCG
CCGGACCCCGAACTTCTCGACTGCACTTTAGGCAGCTGCGTTACCAGGAGGTGGCTGGACCGGAAGAGGCGCTG
AGCCGGCTCCGAGAACTCTGTCGTCGGTGGCTGAGACCCGAGCTGCTCTCCAAGGAGCAGATCCTGGAGCTGCTG
GTGCTGGAGCAGTTCCCTACCATCCTGCCCCGAGGAGCTTCAAGCCTGGGTGCGAGAGCACTGCCAGAGAGCGGG
GAGGAGGCGGTGGCCGTGGTGCGGGCTCTGCAGCGAGCGCTCGATGGAACCTCATCCAGGGGATGGTGACTTTC
GAGGACACGGCTGTGTCTTAACCTGGGAGGAGTGGGAGCGCCTGGACCCAGCACGGAGGGACTTCTGCAGAGAG
AGTGCGCAGAAGGATTCCGGGAGCACAGTTCCGCCGAGTTTGGAAGCAGAGTGGAGAACAAGAGTTGATTCCA
ATGCAACAAATTTTAGAAGAAGCGGAGCCACAGGGGCAACTACAAGAAGCGTTCCAGGGGAAGCGCCCCCTGTTT
TCTAAGTGTGGCAGTACCCATGAGGACAGGGTGGAAAAGCAGTCCGGAGACCCCTTGCCCCTGAACTTGAAAA
TCTCCTGAAGCAGAAGGACTCAACAGCATCTCAGATGTCAATAAGAATGGTTCCATAGAAGGGGAAGACTCTAAA
AATAATGAATTGCAGAACAGTGCCAGGTGTTCCAACCTTGTTCTATGTCAGCACATCCCAGAGCAGAGAGGCC
ACTGACAGTGAGGAACACGGGAACAAGTGCAAGCAAAGTTTCCACATGGTGACGTGGCACGTGCTGAAACCTCAC
AAGTCTGACAGTGAGAGACAGTTTCCATCATTCCAGCCTTTTTGAGACCCAGAGGCAGCTCCATGAAGAAAGACCT
TATAAATGTGGTAACTGTGGGAAGAGTTTCAAACAACGCTCTGACCTCTTTAGACACCAGAGAATCCACACAGGT
GAGAAACCTTATGGCTGCCAAGAATGTGGGAAAAGCTTCAGCCAGAGTGCTGCCCTGACCAAGCACAGAGGACA
CACACAGGCGAGAAGCCGTACACCTGTCTGAAATGTGGGGAGCGCTTCAGGCAGAATTCACACCTAAATCGTCAT
CAAAGTACCCACAGTAGAGACAAACATTTTAAATGTGAGGAATGCGGGGAAACCTGTCTATTTCCAACCTTTTT
AGACATCAGAGACTACATAAAGGGGAAAGACCCTATAAGTGTGAAGAATGCGAGAAGAGCTTCAAACAGCGCTCT
GACCTCTTTAAACACCACAGAATCCACACTGGGGAGAAGCCCTATGGATGTTCCGTCTGTGGGAAACGCTTCAAT
CAGAGTGCAACCCCTATTAAACACCAGAGAATTCACACTGGGGAAAAGCCTTACAAATGTCTTGAATGTGGGGAA
AGATTTAGACAAAGTACACACCTTATCCGACACCAAAGAATTCATCAAAATAAAGTGCTGTGCGCTGGGCGTGGT
GGCTCACGCCTATTAATCCAGCACTTTGGGAGGCCAAGGCAGGCAGATCATTGAGATCAGGAGTTTGAACCAG
CCTGGCCAACATGGTGAAATCTGTCTCTACTAAAAATACAAAAATGAGCCGGGCATGGTGGTGCATGCCTGTAA
GCCAGCTATTCGGGAGGCTGAGGTAGGAGAATCACTTGAACCCAGGAGCGGAAGTTGCAGTGAGCTGAGATCA
TGCCACTGCACTCCAGCCTGGGCAACAGAGCGAGACTCCATCTCAAAAAAGAAATAAAGTGCTGTCATTTTGAT
ATGTT

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FIGURE 2341

MNCSLTAQRRGSDAELGPWVMAARSKDAAPSQRDGLLPVKVEEDSPGSWEPNYPASPDPETSRLHFRQLRYQEV
AGPEEALSRLRELCRRWLRPELLSKEQILELLVLEQFLTILPEELQAWVREHCPESGEEAVAVVRALQRALDGTS
SQGMVTFEDTAVSLTWEWERLDPARRDFCRESAQKDSGSTVPPSLESRVENKELIPMQQILEEAEPQGQLQEAF
QGKRPLFSKCGSTHEDRVEKQSGDPLPLKLENSPEAEGLNSISDVNKNCSI EGEDSKNNELQNSARCSNLVLCQH
IPKAERPTDSEEHGNKCKQSFHMVTWHVLKPHKSDSGDSFHHSSLFETQRQLHEERPYKCGNCGKSFKQRSDLFR
HQRHTGEKPYGCQECGKSFSQSAALTKHQRHTHTGEKPYTCLKCGERFRQNSHLNRHQSTHSRDKHFKCEECGET
CHISNLFRHQRLHKGERPYKCEECEKSFKQRSDLFKHHRIHTGEKPYGCSVCGKRFNQSATLIKHQRHTGEKPY
KCLECGERFRQSTHLIRHQRIHQNKVLSAGRGG SRL

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FIGURE 2342

GGGCACAGCGGACACCAGGACTCCAAAATGCGCTCAGTTGGTGAGTGTCCGGCCCCAGTACCAGTGAAGGACAAG
AAACTTCTGGAGGTCAAAC TGGGGGAGCTGCCAAGCTGGATCTTGATGCGGGACTTCAGTCCTAGTGGCATTTC
GGAGCGTTTCAAAGAGGTTACTACCGGTACTACAACAAGTACATCAATGTGAAGAAGGGGAGCATCTCGGGGATT
ACCATGGTGCTGGCATGCTACGTGCTCTTTAGCTACTCCTTTTCCTACAAGCATCTCAAGCACGAGCGGCTCCGC
AAATACCACTGAAGAGGACACACTCTGCACCCCCCACCCACGACCTTGGCCCGAGCCCTCCGTGAGGAACAC
AATCTCAATCGTTGCTGAATCCTTTCATATCCTAATAGGAATTAACCTCCAAATAAAACATGACTGGTAAAAAA
AA

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FIGURE 2343

MASVGECPAPVPVKDKKLEVKLGELPSWILMRDFSPSGIFGAFQRGYYRYYNKYINVKKGSISGITMVLACYVL
FSYSFSYKHLKHERLRKYH

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FIGURE 2344

TCGCTCGCTCCTCCTTCGCTTCGCCTCGCCGCCGCCATGCAGGAAATCATCGCCAGCGTGGACCACATCAAGTTT
GACTTGGAGATCGCGGTGGAGCAGCAGCTGGGGGCGCAGCCGCTGCCCTTCCCCGGCATGGACAAGTCGGGCGCT
GCTGTCTGTGAATTCTTTTGAAGCTGCCTGCGGCAAAGGGGGCATGTGTCCGTTTCGCCACATCAGTGGTGAG
AAGACAGTTGTGTGCAAACACTGGCTGCGTGGCCTATGCAAGAAAGGGGACCAGTGTGAGTTCCTGCATGAGTAT
GACATGACCAAGATGCCCGAGTGCTACTTCTACTCCAAGTTCGGGGAGTGCAGCAACAAGGAATGTCCCTTCCTG
CACATCGACCCCGAGTCCAAGATCAAGGACTGTCCTTGGTATGACCGCGGCTTCTGCAAGCACGGTCCCCCTCTGC
AGGCACCGGCACACACGGAGAGTCATCTGTGTGAATTACCTCGTGGGATTCTGCCCCGAGGGGGCCCTCGTGTA
TTCATGCACCTCGATTTGAACTGCCCATGGGAACCAACGAGCAGCCCCCACTGCCACAGCAGACACAGCCTCCA
GCAAAGCAAAGTAACAATCCGCCATTACAAAGGTGTCCTCCTTGATCCAGTTAACGAGTCAGAACTCTTCTCCC
AATCAGCAGAGAACCCCGCAGGTCATCGGGGTTCATGCAGAGTCAAAACAGCAGCGCGGGCAACCGGGGACCCCGG
CCACTGGAGCAGGTCACCTGTTACAAGTGTGGCGAGAAAGGACACTACGCCAACAGATGCACCAAAGGGCACTTG
GCCTTTCTCAGTGGACAGTGACAGCAGCTGGAGCCAGCTCCGAGCAGCCCGGGGGCCCCGCTGTTGGGAGTGTGC
ATTTAACTGTTTCATGCGCTTGTTGGCGCGACTGTGGCTCGAGCTGGCCCGCAGACACGTGGGTTTCATCACTCT
GAGGGGCCACGTCTGTAGTTTCCTATCATTTTGCCGTAGTATTTTTTGAAAAGGGACATGTGTCTGTGGGTC
CCTGCAGTCGACATCATGTTTGGCTGGGCATCGATGCCTCCTTTCTGGGACTCCCGGCACAACTCCCTCATCCA
GGGAGGGAGGCAGCTGCTGGGGAGGGGCTTGGCTAGGTAGTTCTGTGTGGCGGTGGTCATTCCCTCATTAAACA
CCAGTTCTTGGTGACGCCAGGGGCTGGTAGGTCAATCAAAGCTGTGGCCAGCTCACGCCTGCTTCCTCCCTCCCT
GCCCTGCTGAATCCTAAAGCTGTGCCTATATCTGTGATTTGAATGAGGGAGCCCTTTGGGGCAAATTCAGGTGCC
CCCATTGCCTCAGGCTGGCCCTGGTCCCAGGTGGCAGCGGTTGAGGAGGGGTACAGGGCTCTCAAGCCTGAGGTT
TTCTTCTCTGGGCTTAATTTTCTCTTGGGGTACGTGCCTGACAGTGTTTAAGGTGTCCGTTGAAGTGGAGTTGCA
GACTTTTAAATAGATGACCCCTTCAGATCATCTGTGCCTACCTCCTGCCCATCAGGCGTCTACACTGTCACTCAG
ACACCTGTGGCATGTGGAGGAGACTGCCCTGTCTGAGCCTGGAAAATGTGAACTGTCTCCTGCAACCTGCTGG
GCATGTGGGCCTGGCTGTGTTCAATTGCAAGAACAATTTTATGAAATGGATTAAAGCTTGTTTTTT

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FIGURE 2345

MQEIIASVDHIKFDLEIAVEQQQLGAQPLPFPMDKSGAAVCEFFLKAACGKGGMCPFRHISGEKTVVCKHWLRGL
CKKGDQCEFLHEYDMTKMPECYFYSKFGECSNKECPFLHIDPESKIKDCPWYDRGFCKHGPLCRHRHTRRVICVN
YLVGFCPEGPSCKFMHPRFELPMGTTEQPPLPQQTQPPAKQSNNPPLQRSSSLIQLTSQNSSPNQQRTPQVIGVM
QSQNSSAGNRGPRPLEQVTCYKCGEKGHYANRCKGHLAFLSGQ

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FIGURE 2346

CTGAGGCGGGAGACCGGTGGTCTGCACCGTCCTGGAGGGAGATATGAGTGGCTGGACTCTCAGCCAGCCACTGGG
ATGTGTTTCGGGCTTTGGACCTTGAGGCCGGAGAGAGCTCCCGAGAGGAGGCGGCGCCACGTTTCGTTCTTCTGAGG
GGACGGTAGATTTGGGGGTTTTCTCTAGGATTCTCGCGCCGTTTTCTCTGAAGAAACAGGACCAGAGAGGGAAG
GTGACCTGAAAGTCACAGAATAATTTTTTAGAGCTGAACAAGAATCCAAGCCTGCAACTGCAGAGACGAGAGATC
TTTCTGCTGTCTATACTCTTGAAAGCACATCCTAAGATCTTTGCAGATTATCCTGTGGAAGGAAAATGCTCTAAA
GTCAAAGAAGCCGGAAGCACCCCCAGATGGCTGGGAGTTGATTGAGCCAACACTGGATGAATTAGATCAAAAG
ATGAGAGAAGCTGAAACAGAACCGCATGAGGGAAAGAGGAAAGTGGAATCTCTGTGGCCCATCTTCAGGATCCAC
CACCAGAAAACCCGCTACATCTTCGACCTCTTTTACAAGCGGAAAGCCATCAGCAGAGXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXACAAAACCTGATTGCAAAATGGAAAAAGCAAGGATATGAGAACTTGTGCTGCCTG
CGGTGCATTTCAGACACGGGACACCAACTTCGGGACGAACTGCATCTGCCGCGTGCCCAAAAGCAAGCTGGAAGTG
GGCCGCATCATCGAGTGCACACACTGTGGCTGTCTGTGGCTGCTCTGGCTGAGGCTGGCGCGCTCCACCCTGGACT
CTGGACTTCGCAGGTTCTGCCTGTCACGCCACCCCTTCTGGGAGCAGCGAGCAGTGCCCCAGGCCCGAGTTG
GAGCACGGTCTCTATGGGGAAGGCTTCGCTGTCTATCAGCTGTGATTTGTAAAAATAAAATCTTTAAATCTCTCG

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FIGURE 2347

MPKVKRSRKAPPDGWELIEPTLDELQKMREAETEPHEGKRKVESLWPIFRIHHQKTRYIFDLFYKRKAISRXXX
XXXXXXXXXXXXKNLIAKWKQGYENLCCLRCIQTRDTNFGTNCICRVPKSKLEVGRIEEECTHCGCRGCSG

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FIGURE 2348

GGCACGAGGGAGCCCAGAGCCGGTTCGGCGCGTCTGACTGCCAGAGTCCGCGGCCGGGGCGCGGGAGGAGCCAAG
CCGCCATGGCCTACCACAGCTTCCTGGTGGAGCCCATCAGCTGCCACGCCTGGAACAAGGACCGCACCCAGATTG
CCATCTGCCCCAACCAACCATGAGGTGCATATCTATGAAAAGAGCGGTGCCAAATGGACCAAGGTGCACGAGCTCA
AGGAGCACAAACGGGCAGGTGACAGGCATCGACTGGGCCCCCGAGAGTAACCGTATTGTGACCTGCGGCACAGACC
GCAACGCCTACGTGTGGACGCTGAAGGGCCGCACATGGAAGCCACGCTGGTCATCCTGCGGATCAACCGGGCTG
CCCCTGCGTGCCTGGGCCCCCAACGAGAACAAGTTTGCTGTGGGCAGCGGCTCTCGTGTGATCTCCATCTGTT
ATTTGAGCAGGAGAATGACTGGTGGGTTTGCAAGCACATCAAGAAGCCATCCGCTCCACCGTCCTCAGCCTGG
ACTGGCACCCCAACAATGTGCTGCTGGCTGCCGGCTCCTGTGACTTCAAGTGTGCGATCTTTTCAGCCTACATCA
AGGAGGTGGAGGAACGGCCGGCACCCACCCCGTGGGGCTCCAAGATGCCCTTTGGGGAACCTGATGTTTGAATCCA
GCAGTAGCTGCGGCTGGGTACATGGCGTCTGTTTCTCAGCCAGCGGGAGCCGCGTGGCCTGGGTAAAGCCACGACA
GCACCGTCTGCCTGGCTGATGCCGACAAGAAGATGGCCGTGCGGACTCTGGCCTCTGAAACACTACCACTGCTGG
CGCTGACCTTCATCACAGACAACAGCCTGGTGGCAGCGGGCCACGACTGCTTCCCGGTGCTGTTACCTATGACG
CCGCCGCGGGGATGCTGAGCTTCGGCGGGCGGCTGGACGTTCTAAGCAGAGCTCGCAGCGTGGCTTGACGGCCC
GCGAGCGCTTCCAGAACCTGGACAAGAAGGCGAGCTCCGAGGGTGGCACGGCTGCGGGCGCGGGCCTAGACTCGC
TGACAAGAACAGCGTCAGCCAGATCTCGGTGCTCAGCGGCGGCAAGGCCAAGTGCTCGCAGTTCTGCACCACTG
GCATGGATGGCGGCATGAGTATCTGGGATGTGAAGAGCTTGGAGTCAGCCTTGAAGGACCTCAAGATCAAATGAC
CTGTGAGGAATATGTTGCCTTCATCCTAACTGCTGGGGAAGCGGGGAGAGGGGTGAGGAGGCTAATGGTTGCTT
TGCTGAATGTTTCTGGGGTACCAATACGAGTTCCCATAGGGGCTGCTCCCTCAAAAAGGGAGGGGACAGATGGGG
AGCTTTTCTTACCTATTCAAGGAATACGTGCCTTTTCTTAAATGCTTTCAATTTATTGAAAAAAAAAAAAAAAAA
AAA

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FIGURE 2349

MAYHSFLVEPI SCHAWNKDRTQIAICPNNHEVHIYEKSGAKWTKVHELKEHNGQVTGIDWAPESNRIVTCGTDRN
AYVWTLKGRTWKPTLVILRINRAARCVRWAPNENKFAVGSGSRVISICYFEQENDWWVCKHIKPIRSTVLSLDW
HPNNVLLAAGSCDFKCRIFSAYIKEVEERPAPTPWGSKMPFGELMFESSSSCGWVHGVCFSASGSRVAWVSHDST
VCLADADKKMAVATLASETLPLLALTFTITDNSLVAAGHDCFPVLFTYDAAAGMLSFGGRLDVPKQSSQRGLTARE
RFQNLDDKKASSEGGTAAGAGLDSLHKNSVSQISVLSGGKAKCSQFCTTGMDGGMSIWDVKSLESALKDLKIK

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FIGURE 2350

CAGCTTTCTCTCCTTTGAAAACACTAAGAATAATGTCACCTGTCATCAGTTTTTACTAGAGCCAATCACCTGTCATG
CCTGGAACAGGGATCGTACTCAGATTGCCCTCAGTCCCAATAATCACGAAGTGCACATCTATAAGAAGAACGGGA
GCCAGTGGGTGAAAGCTCATGAACTCAAGGAGCACAACGGACACATCACAGGTATTGACTGGGCTCCCAAGAGCG
ACCGCATTGTCACTTGTGGGGCAGACCGCAATGCCTATGTCTGGAGTCAGAAAGATGGTGTGTTGGAAGCCAACCC
TGGTGATCCTGAGAATTAATCGCGCAGCTACTTTTTGTGAAGTGGTCCCCCTAGAGAACAAATTTGCTGTGGGAA
GTGGAGCAGGACTCATTCTGTTTGTTACTTTGAGTCTGAAAATGACTGGTGGGTGAGCAAGCACATTAAAAAGC
CGATTGCTCCACAGTCCTCAGCTTGGATTGGCATCCCAACAACGTTTTGCTGGCAGCAGGATCATGTGACTTCA
AATGCAGAGTGTCTTCTGCCTACATTAAAGAAGTGGATGAAAAGCCAGCCAGCACGCCCTGGGGCAGCAAGATGC
CTTTTGGGCAGCTGATGTGAGAGTTTGGTGGCAGTGGCACTGGTGGCTGGGTCCACGGGGTAAGCTTCTCTGCCA
GTGGGAGCCGCCTGGCCTGGGTGAGCCACGACAGCACCGTGTCTGTTGCTGATGCCTCAAAAAGTGTGCAGGTCT
CGACTCTGAAGACAGAGTTCTGCGCTCCTAAGTGTGTCAATTTGTCTCAGAGAACAGCGTCGTGGCTGCTGGCC
ATGACTGCTGCCCCAATGCTCTTTAACTACGATGACCGCGGCTGCCTGACCTTCGTCTCCAAGTTAGATATTCCAA
AACAGAGCATCCAACGCAACATGTCTGCCATGGAACGCTTCCGCAACATGGACAAGAGAGCCACAACCTGAGGACC
GCAACACGGCCTTGGAGACGCTGCACCAGAATAGCATCACTCAAGTCTCTATTTATGAGGTGGACAAGCAAGATT
GTCGCAAATTTGCACTACTGGCATCGATGGAGCCATGACAATTTGGGATTTCAAGACCCTCGAGTCTTCCATCC
AGGGCCTCCGGATAATGTGAAGCTGAGTG

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FIGURE 2351A

CTCCTCTGCTCCTCGAAGAAGGCCAGGGCGGGCGCTGCCGCAAGTTTTGACATTTTCGCAGCGGAGACGCGCGCGG
GCACTCTCGGGCCGACGGCTGCGGCGGGCGGCCGACCCTCCAGAGCCCCCTTAGTCGCGCCCCGGCCCCCTCCGCTGC
CCGGAGTCCGGCGGGCCACGAGGCCAGCCGCGTCTCCCGCGCTTGCTCGCCCCGGCGGCCGAGCCATGTCCCGG
GGGCCCCGAGGAGGTGAACCGGCTCACGGAGAGCACCTACCGGAATGTTATGGAACAGTTCAATCCTGGGCTGCGA
AATTTAATAAACCTGGGGAAAAATTATGAGAAAGCTGTAAACGCTATGATCCTGGCAGGAAAAGCCTACTACGAT
GGAGTGGCCAAGATCGGTGAGATTGCCACTGGGTCCCCCGTGTCAACTGAACTGGGACATGTCTCATAGAGATT
TCAAGTACCCACAAGAACTCAACGAGAGTCTTGATGAAATTTTAAAAAATTCACAAAGAGATTATCCATGAG
CTGGAGAAGAAGATAGAACTTGACGTGAAATATATGAACGCAACTCTAAAAAGATACCAAACAGAACACAAGAAT
AAATTAGAGTCTTTGGAGAAAATCCCAAGCTGAGTTGAAGAAGATCAGAAGGAAAAGCCAAGGAAGCCGAAACGCA
CTCAAATATGAACACAAAGAAATTGAGTATGTGGAGACCGTTACTTCTCGTCAGAGTGAAATCCAGAAATTCATT
GCAGATGGTTGCAAAGAGGCTCTGCTTGAAGAGAAGAGGCGCTTCTGCTTTCTGGTTGATAAGCACTGTGGCTTT
GCAAACACATACATTATTATCACTTACAGTCTGCAGAACTACTGAATTCGAAGCTGCCTCGGTGGCAGGAGACC
TGTGTTGATGCCATCAAAGTGCCAGAGAAAATCATGAATATGATCGAAGAAATAAAGACCCAGCCTCTACCCCC
GTGCTCGGAACTCCTCAGGCTTACCCCATGATCGAGAGAAGCAATGTGGTTAGGAAAGATTACGACACCCCTTCT
AAATGCTCACCAAAGATGCCCCCGCTCCTTCAGGCAGAGCATATACCAGTCCCTTGATCGATATGTTTAATAAC
CCAGCCACGGCTGCCCCGAATTCACAAAGGGTAAATAATTCAACAGGTACTTCCGAAGATCCCAGTTTACAGCGA
TCAGTTTCGGTTGCAACGGGACTGAACATGATGAAGAAGCAGAAAGTGAAGACCATCTTCCGCGACACTGCGGGC
TCCAACAAGACCTTACTCAGCTTTGCACAGGGAGATGTCATCACGCTGCTCATCCCCGAGGAGAAGGATGGCTGG
CTCTATGGAGAACACGACGTGTCCAAGGCGAGGGGTTGGTTCCCGTCGTCGTACACGAAGTTGCTGGAAGAAAA
GAGACAGAAGCAGTGACCGTGCCACGCCAAGCCCCACACCAAGTGAAGAAGCATCAGCACCCTGAACCTGTCTGAG
AATAGCAGTGTGTGTCATCCCCCACCAGCTACTTGAATGCTTGTCCATGGGGGAGCTGCCGACAGGAGCA
GATTGCGCCAGGACGACATCCACCTTAAAGGCCCGAGCGTCCAAGCCGAGACCGCGGCTCCTAACGATGCCAAC
GGGACTGCAAAGCCGCTTTTCTCAGCGGAGAAAACCCCTTTGCCACTGTGAACTCCGCGGCTGTGACGAAT
GATCGCTCGGCACCCATCATTCGATGAGAGGACAGCCAAGGACTCTCCCGGGCCTCTCCGGTTCTCCCTTGCGGA
ATGATGGGCGCATCTGTCTGCCACGTGCTGACGGTCGGGAAGCTTCAGTGGAGAGGCCCTAACTCTAATGTGCGC
TGCTTAAGCAAATCATGCTTCTGTTCACGTAGTTGGGTTGACAAGTTTCTGCCTTTAAGATAAATGAGTAAT
AGTCTAATGACCAGCTCAGCCATTTAAATATTTTCTTCTATTCTGTTCAAGAAACAGTAAACTTGGTTTCAAT
CTTTACTGTATTTTTTAAATGAATTTTTCTTAAACAGCCAGAATAAGGGATAGTCTATGCTTTACAGGACTG
GCTTTCTGCACCTGATATGAATGAGACCAGTTTTATTTTATAAAGCATGTGCTCTTAATAGCATTATGTCTAAAG
AAGATATCACGTAAGTTTGCATCTTAGCATGCAAATCATAATTTAAGCAATATAAATTATGAAAATACTATATA
AATGTAATTTAACTTAAATGTTTAAGTGTAGAGCTTCCAGAGATGGAGAAACCCCCACCCTCCCTCCAACCAG
CCAGAGCTGTAGAGTGCTAAGACGCTTTGCCCTGCCCCTTATCACAGCCACACGTAGCACTCGACGAAATCTCCTCC
GAGAGCTCCTTTCTTGCTAGTTAGGAGTCGCCAACGGATTGCTGCACACGGCCCATCCAGGACACAGGCCTGG
GCGTCGGAGTCACGGCTCCTTGTGTTCTCACTCAGCTAGTTGGCCAAAGCTGCATCCATTACCAGTACACTCAA
CTGCTCGGGGCTCCTGGTTTCTCCGTGTTTGAATCAGGTACAGACTCTCAAAGGATACGTGTAAAGCCAGGATGAC
CTCTGGTGCCTGGAAGGGCGGGTTTTTCAGCCTAGCAGCCATGATGCCCTCGGAACCTGGCCCTATGGTATGG
ATGTGAGGACTACGCACCTGGCTGCCCTGAGCCCCGGGGCTGGAAATCATCTTTGGCTGCCAAGGATCTGGACCTAT
TTTGAGTGGAGAGTCATGGTTAAAAATTTCCAGCCCCGGCCAGGTACGGGAATCCAGCATTGTTGTGAGGCCGAG
GCAGGGGGATCACCTGAGGTGAGGAGTCTCTACTAAAAATACAAAAATTAGACAGGTGTGGTGGTGGGCGCCACT
CAGGAGGCTGAGGCAGGAGAATCACTTGAACCCGGGAGGCAGAGGTTGCAGTGAGCCAGATCATGCTGCTGCACT
CCAGCCCCGGCCGCTCACCGTGTGTGTTGCTGGGTGCTGGGGCTGTGACTTATCCCCTCTCCTTTAGCCTTGCCAT
AAGTGTAGTATCCTATGAGGCTGAGATTGGGAAAGGTTACATGCAGGTAAGCCAGTGAGCGTGGCCGATGCTTCA
GGCTCCTTCCAGCCAGGTCCAGCAGTGTACCATCTGCTTCTCCTGGGAGGACAAAACAGGCACCCCCACCATGA
AGGGGCTGCAGGCACCATGAACTATGTTAAACAACCCAGTCTGTACTACAGAAAGGGCTGCAGCCACATGAGAAT
TCAGTCCACACAAGCCCCATGGCCGTGTTCCCCACTTCAGCCACAGGGCTCAGGGAGCCCCATCTGGCGCTAAGG
GGAAGTGTGGGGTGTGGGTGACACCTGGCCTTTGGCGTTCTGCCTTGGGGAGGTTTCTGGTTTGTGTACGGGGT
GGAAGAATAGGACCTGGGGGTCTCGGATGCAACCTGCAGACCCCGTGGCTCACCCAACCCAGGTTCTGCCTCCC
AGACCAGAACGGGCATGGCCTGGTCTTGGCACCGAGGTGCCTGCTCTGTAAATATCAAGGGATTACAACCTTAA

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FIGURE 2351B

TAATAAAGCAGAACTTG

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FIGURE 2352

GGCGGTTGGCAAGAACAAGCGCCTTACGAAAGGCGGCCAAAAGGGAGCCAAGAAGAAAGTGGTTGATCCATTTTC
TAAGAAAGATTGGTATGATGTGAAAGCACCTGCTATGTTTCAGTATAAGAAATATTGGAAAGACGCTCGTCACCAG
GACCCAAGGAACCAAAATTGCATCTGATGGTCTCAAGGGTCGTGTGTTTGAAGTGAGTCTTGCTGATTTCAGAA
TGATGAAGTTGCATTTAGAAAATTCAGGCTGATTACTCTTCGTCTGTTCTGTGTTGGTTTTACTAAAAACGCAA
CAATCAGATACGGAAGACCTCTTATGCTCAGCACCAACAGGTCCGCCAAATCCGGAAGAAGATGATCGAAATCAT
GACCCGAGAGGTGCAGACAAATGACTTGAAAGAAGTGGTCAATAAATTGATTCCAGACAGCATTGGAAAAGACAT
AGAAAAGGCTTGCCAGTCTATTTATCCTCTCCATGATGTCTTCGTTAGAAAAGTAAAAATGCTGAAGAAGCCCAA
GTTTGAATTGGGAAAGCTCATGGAGCTTCATGGTGAAGGCAGTAGTTCTGGAAAAGCCACTGGGGACGAGACAGG
TGCTAAAGTTGAACGAGCTGATGGATATGAACCACCAGTCCAAGAATCTGTTTAAAGTTCAGACTTCAAATAGTG
GCAATAAAGAGTGCTATTTGTGAAAAAAAAAACAAAAAAAAAA

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FIGURE 2353A

CGCAGTGCTGCTGGGGCATTGCCTGTGACAACCAGGTCTACGTGTATGTGTGTGCCAGCGATGTCCCCATCCGCC
GCCGAGAGGAGGCCTATGAGAATCAGCGCTGGAATCCCATGGGCGGCTTCTGTGAGAAGCTCCTGCTGAGTGACC
GCTGGGGGTGGAGTGACGTGAGTGGGCTCCAGCACCGGCCGCTGGACAGGGTGGCACTGCCCTCGCCGCACTGGG
AGTGGGAGTCTGACTGGTACGTGGATGAGAATTTTGGAGGTGAACCCACTGAGAAAGGGGGTGGACGTACGCCA
TCGACTTTCCCGCCACCTACACGAAAGACAAGAAGTGAATTTCTTGTGTGCGGCGCCGGAAGTGGATCCGGTACA
GGAGATACAAGTCCCGGGACATCTGGGCAAGATCCCCTCGAAGGATGACCCCAAGGAGCTGCCCGACCCCTTCA
ACGACCTCTCTGTAGGGGGCTGGGAGATCACGGAGGAGCCTGTGGGCGCCTGTCAGTGTGGGCTGTGTCTCTGC
AGGGCAAGGTGTGGTACAGAGAGGACGTACGCCACTCCAACCCGAAGGGTCTCTCTGGTCCCTGCTGGACACCC
CCGGGGAGGTGGTTTCAATCAGCTGTGGGCCCCACGACCTCCTGTGGGCCACACTCTGGGAGGGACAGGCCCTGG
TCCGGGAAGGAATCAACAGGAGCAATCCCAAAGGAAGTTCTTGGTCCATCGTGGAGCCTCCTGGATCTGAAAACG
GGGTCAATGCACATCTCGGTGGGAGTCAGCGTGGTCTGGGCTGTACCAAGGACTGGAAGGTGTGGTTCCGAAGAG
GCGTCAACTCTCACAATCCCTGCGGCACCAAGTTGGATTGAGATGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT
TGAACGACCAGGTGTGGGGCATTGGCTGTGAGGACCGAGCCGTGTACTTCCGGCAGGGTGTACCCCCAGCGAGC
TCAGTGGGAAGACCTGGAAAGCCATCATCGCGGCCCGAGAGTGTGACCGGTACACTCTGGCAGCTCGTCTAGTC
TCCTCAGTGCCGGCTGCTTCTTCGGTGATGAGGTGAGGGGTAGTGGCGAGTCTGCCCCAGCGACACCGATGCCCT
CCTCGGAAGTCGAGAGACAGGGCCTGGCCAGATTCTCCTGCAGAACCTCTAGACGATTCCAAGAATGCCACAG
GGAACCTAGCCTCAGGCCTGGGGGCTGGCAGGACCGCAGAAGATACCGTGGAAAGATGCCTGCCAGCCGAGGGCA
GCAGGGAGGCCAGACCCAACACGCACCCCGGGCCCGGGCCCCACCCCGGCCGAGCTGCCCTGGACCAATATTGACC
TCAAGGAGGCCAAGAAAGTGGCCAGCCACTCGGCCGCTGGCTTCCCGAGACCACAGCCCTCTCCTCTCTGGGGC
TCTCTCCACTGGGCTTGGAGGAGCCGTATGGGGTGGATGACCACCCGCTGTGGGGCTGGGTGTGGGAGCGGGCT
GCGTGGTGGAGGCATGTGCCATGCCCAGATGGTTCACTGTCCAGGCGGGCCTGTCTCTCGGTACACATGCTGT
CCCTGTCCATCACGCCGGCCAGACCGCTGCCTGGAGGAAGCAGATCTTCCAGCAGCTCACGGAAGGACCAAGC
GGGAGCTGGAGAACTTCACTACTACGAGCAGGCCGTGGAGCAGTGGTGTGGGTGAAGACCGGGGCGCTGCAGT
GGTGGTGGGACTGGAAGCCCCACAAGTGGGTGGACGTGCGCTTGGCCCTGGAGCAGTTACGGGGCACGACGGCG
TCCGGGACAGCATCCTCTTCACTACTATGTGGTCCACGAGGAGAAGAAGTACATCCACATATTCTGAATGAGG
TGGTGGCGCTGGTCCAGTGCTGAACGAGACCAAGCAGTCCCTTGGCCCTGTACACCCCTGAGCGGACACGGCAGA
GGTGGCCGGTGGCTGTGGCTGTGCCACCGAGCAGGACATGAATGACTGGCTCGCCCTGCTCAGCCTGTCTTGCT
GCGAGAGCCGGAAGGTGACGGGCCGCGCTCCCCGAGGCCATCTGGTCCATCACCTGCAAGGGGGACATCTTCG
TGAGCGAGCCAGCCAGACCTGGAGGCCACGAGCACCCCTGCCCCTGCGACCAGATGTTTTGGCGGCAGATGG
GAGGCCACCTGCGGATGGTGGAGGCCAACAGCCGGGGCGTGGTGTGGGGCATCGGCTATGACCACAGGCCCTGGG
TATACACAGGCGGCTATGGAGCGGCTGCTTCCAAGGCCTGGCCAGCAGCACCAGTAACATCTACACGCAGTCAG
ACGTGAAGTGTGTTACATCTATGAGAACCAGCGCTGGAACCCCGTCACAGGCTACACCAGCAGGGGTCTGCCCA
CGGACCGGTACATGTGGAGCGATGCCTCGGGGCTGCAGGAGTGCACGAAGGCTGGCACGAAGCCCCCGTCCCTGC
AGTGGGCCTGGGTTTCCGACTGGTTCTGTGGATTTCAGCGTTCCGGGGGGCACGACCAGGAGGGGTGGCAGTATG
CCAGCGACTTCCCTGCCCTCATACCATGGGTCCAAAACGATGAAGGATTTTGTGAGGAGGAGGTGCTGGGCCAGAA
AATGCAAGCTGGTGACCAGTGGGCCCTGGCTGGAGGTGCCCCCATCGCCCTCAGGGACGTGTCCATCATCCCGG
AGAGCCCGGGTGCCGAGGGGAGTGGGCACAGCATCGCCCTCTGGGCGCTCAGCGACAAGGGGGATGTGCTGTGCC
GCCTGGGCGTGTGCGAGCTCAACCCCTGCGGGCTCCTCCTGGCTGCACGTTGGCACCGACAGCCCTTCGCCTCCA
TCTCCATCGGGGCTGTACCAGGTGTGGGCGTGGCAAGGGACGGCTCCGCTTCTACCGGGGATCCGTGTACC
CCTCGCAGCCAGCCGGTGAATGCTGGTACCACATCCCGTCCCCACCGAGACAGAGGCTGAAGCAGGTGTCCGCGG
GGCAGACGTGGGTGTATGCCCTGGATGAGAATGGAAACCTGTGGTATCGCCAAGGGATCACGCCAGCTACCCGC
AGGGCTCCAGCTGGGAGCACGTGTCCAACAACGTGTGCCGAGTGTCCGTGGGGCCCCCTGGACCAGGTCTGGGTGA
TCGCCAACAAAGTGCAGGGCAGCCACAGCCTGAGCCGGGGGACAGTGTGTATCGCACCGGGCGTGCAGCCTCACG
AGCCCAAGGGGCCACGGCTGGGACTACGGCATCGGGGGAGGCTGGGACCATATCTCTGTCCGGGGCAATGCCACCA
GGGCCCCCGGAGCTCGTCCCAGGAGCAGGAGCCGAGTGCCCCACAGAGGCCCATGGCCCCGTCTGCTGCTGAG
GCCCCCCCACACACCTACATGCAGGGACGGTGGCCAGTTTGGGGGATCAAGGCTGAGCCATTCTTGTGCTGGAGT
GTGCACCGTGGGAGCAATGTGGCCAGGTGGACTCAGGAGGGAACCTGGCCCCAAGGCTGCGGCCACTTCAGAGG
CACTGGCTGAGACGGCCCTGAAATGTGAAGCTCCGCGGACACTCCACACGTGTCCCGTCTGCGAGGAGTCCCG

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FIGURE 2353B

GGGTGTGGGGCATGGGGTGGGGCTGCACCTCCCAGAGGCCCTCCCACCCTTCCCTTCCCCTCTCCCTTCTGCCT
TTCCAGGACTAGAACCGGGAACCTGGAGCCCTCCGGGAACGCCGGCCCTGGGGCAGCAGAGCCAGGATGGAGCCC
TCCTGAGCTGGCATCTCAGACAGCACCCGGGCCCCGCCACCCCTCACCAAGAGAGATGGCCATGGGGCTCAGGGCC
TCTTTACCATGTGCAGTGACCATTCTCAGAGCAGGACTTGCAAAGAGGCTTTAATTTCAAAGTGAAGGAAGGA
GGCCAGGCGCCGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGCTGAGGTGGGCAGATCACCTAGGTCAAGA
GTTTCAAACCAGACGGGCCAACATGGTGAAACCCCATCTCTGCTAAAAATACAAAAAAAAAAAAATTAGCTGGGC
ATGGTGGTGGGTGCCTGTAATCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATCGTTTGAACCCGGGAGGCGGAG
GCTGCAGTGAGCCGAGATCATGCCACTGCACTCCAGCCTGGGCGACAGAGACTCCATCTC

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FIGURE 2354

MGWGCTSQRLPPFPSPLPFAFPGLEPGTWSPPGTPALGQQSQDGALLSWHLRQHPGPPPLTKRDGHGAQGLFTM
CSDHFSEQDLQRGFNFKSEGRRPGAVAHACNPSTLGG

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FIGURE 2355

AAACTTCCCGCACGCGTTACAGGAGCCAGGTCGGTATAAGCGCCAGCGGCCTCGCCGCCCCGTCAAGCTGTCCACA
TCCCTGGCCTCAGCCCGCCACATCACCCCTGACCTGCTTACGCCCAGATTTTCTTCAATCACATCTGAATAAATCA
CTTGAAGAAAGCTTATAGCTTCATTGCACCATGTGTGGCATTGTTGGCGCTGTTTGGCAGTGATGATTGCCTTTCT
GTTCAGTGTCTGAGTGCTATGAAGATTGCACACAGAGGTCCAGATGCATTCCGTTTTGAGAAATGTCATGGATAC
ACCAACTGCTGCTTTGGATTTTACCAGGTTGGCGGTAGTTGACCCGCTGTTTGGAAATGCAGCCAATTTCGAGTGAAG
AAATATCCGTATTTGTGGCTCTGTTACAATGGTGAAATCTACAACCATAAGAAGATGCAACAGCATTTTGAATTT
GAATACCAGACCAAAGTGGATGGTGAGATAATCCTTCATCTTTATGACAAAGGAGGAATTGAGCAAACAATTTGT
ATGTTGGATGGTGTGTTTGCATTTGTTTTACTGGATACTGCCAATAAGAAAGTGTTCCCTGGGTAGAGATACATAT
GGAGTCAGACCTTTGTTTAAAGCAATGACAGAAGATGGATTTTTGGCTGTATGTTCAGAAGCTAAAGGTCCTGT
ACATTGAAGCACTCCGCGACTCCCTTTTTAAAGTGGAGCCTTTTCTTCCCTGGACACTATGAAGTTTTGGATTTA
AAGCCAAATGGCAAAGTTGCATCCGTGGAAATGGTTAAATATCATCACTGTCGGGATGAACCCCTGCACGCCCTC
TATGACAATGTGGAGAACTCTTTCAGGTTTTGAGATAGAACTGTGAAGAACAACCTCAGGATCCTTTTTAAT
AATGCTGTAAAGAAACGTTTGATGACAGACAGAAGGATTGGCTGCCTTTTATCAGGGGGCTTGGACTCCAGCTTG
GTTGCTGCCACTCTGTTGAAGCAGCTGAAAGAAGCCCAAGTACAGTATCCTCTCCAGACATTGCAATTGGCATG
GAAGACAGCCCCGATTTACTGGCTGCTAGAAAGGTGGCAGATCATATTGGAAGTGAACATTATGAAGTCCTTTTT
AACTCTGAGGAAGGCATTACAGGCTCTGGATGAAGTCATATTTTCTTGGAACTTATGACATTACAACAGTTCGT
GCTTCAGTAGGTATGTATTTAATTTCCAAGTATATTGGAAGAACACAGATAGCGTGGTGATCTTCTCTGGAGAA
GGATCAGATGAACCTACGCAGGGTTACATATATTTTACAAGGCTCCTTCTCCTGAAAAAGCCGAGGAGGAGAGT
GAGAGGCTTCTGAGGGAACTCTATTTGTTTGATGTTCTCCGCGCAGATCGAACTACTGCTGCCCATGGTCTTGAA
CTGAGAGTCCCATTCTAGATCATCGATTTTCTTCTTACTTGTCTCTGCCACCAGAAATGAGAATTCCAAAG
AATGGGATAGAAAAACATCTCCTGAGAGAGACGTTTGAGGATTCCAATCTGATACCCAAAGAGATTCTCTGGCGA
CCAAAAGAACCTTCAGTGATGGAATAACTTCAGTTAAGAATTCTTGGTTTAAGATTTTACAGGAATACGTTGAA
CATCAGGTTGATGATGCAATGATGGCAAATGCAGCCCAGAAATTTCCCTTCAATACTCCTAAACCAAAGAAGGA
TATTACTACCGTCAAGTCTTTGAACGCCATTACCCAGGCCGGGCTGACTGGCTGAGCCATTACTGGATGCCCAAG
TGGATCAATGCCACTGACCCTTCTGCCCCGACGCTGACCCACTACAAGTCAGCTGTCAAAGCTTAGGTGGTCTTT
ATGCTGTAATGTGAAAGCAAATATTTCTTCGTGTTGGATGGGGACTGTGGGTAGATAGGGGAACAATGAGAGTCA
ACTCAGGCTAACTTGGGTGTGAAAAAATAAAAGTCCTAAATCT

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FIGURE 2356

MCGIWALFGSDDCLSVQCLSAMKIAHRGPDAFRFENVNGYTNC CFGHRLAVVDPLFGMQPIRVKKYPYLWLCYN
GEIYNHKKMQQHFEFEYQTKVDGEIILHLYDKGGIEQTICMLDGVFAFVLDDTANKKVFLGRD TYGVRPLFKAMT
EDGFLAVCSEAKGLVTLKHSATPFLKVEPFLPGHYEVLDLKPNGKVASVEMVKYHHC RDEPLHALYDNVEKLFPG
FEIETVKNNLRILFNNAVKKRLMTDRRIGCLLSGGLDSSLVAATLLKQLKEAQVQYPLQTFAIGMEDSPDLLAAR
KVADHIGSEHYEVLFNSEEGIQALDEVIFSLETYDITTVRASVGMYLISKYIRKNTDSVVIFSGEGSDELTQGYI
YFHKAPSPEKAEESERLLRELYLFDVLRADRTTAAHGLELRVPFLDHRFSSYYLSLPPEMRIPKNGIEKHLRE
TFEDSNLIPKEILWRPKEAFSDGITSVKNSWFKILQEYVEHQVDDAMMANAAQKFPFNTPKTKEGYYYRQVFERH
YPGRADWLSHYWMPKWINATDPSARTLTHYKSAVKA

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CCTTTCTGTCCTGGTTCCCTGTAAGCATCGAGAGGGAACCGCGGCCGCGGACGGCCGCGGACCGCTCCGGAGAGGAGGAGCA
GCGGCAGTTTTGAGCCCCGTGTAATGTTATATGTGTACTTTTTTTTTTACTATGTGGCGTCGAAGCCTGTGGACATT
TCGCGGTCCGGGTCCCTGCGGCGGACGGGTCCGATCGTGTCTGTGGCCAGGGCGCAGTCAGGTGTGCGTGGTCC
TGATCTAGGAAGAGACTGCGGCCTTATCACCGTCTCGGTGTCTGCTTTACCTTCAACTGCCCCCTCCTCACCT
GGACCGCTCACCTCCTCCTCCCCTCTCACCCCGCCATCCCCACCAGTCCCCACCTGTCTCTGTAGACTGCAAGA
CTCATCAAGTGACTTGCTGAGCAAACCTGCCGAGAAGAGATTTTCTTCAATCACATCTGAATAAATCACTTGA
GAAAGCTTATAGCTTCATTGCACCAATGTGTGGCATTGTGGCGCTGTTTGGCAGTGATGATTGCCTTTCTGTTTCA
TGTCTGAGTGCTATGAAGATTGCACACAGAGGTCCAGATGCATTCCGTTTTGAGAATGTCAATGGATACACCAAC
TGCTGCTTTGGATTTACCGGTTGGCGGTAGTTGACCCGCTGTTTGGAAATGCAGCCAATTTCAGTGAAGAAATAT
CCGTATTTGTGGCTCTGTTACAATGGTGAAATCTACAACCATAAGAAGATGCAACAGCATTTTGAATTTGAATAC
CAGACCAAAGTGGATGGTGAGATAATCCTTCATCTTTATGACAAAGGAGGAATTGAGCAAACAATTTGTATGTTG
GATGGTGTGTTTGCAATTTGTTTTACTGGATACTGCCAATAAGAAAGTGTTCTGGGTAGAGATACATATGGAGTC
AGACCTTTGTTTAAAGCAATGACAGAAGATGGATTTTTGGCTGTATGTTTCAGAAGCTAAAGGTCTTGTTACATTG
AAGCCTCCGCGACTCCCCTTTTTAAAGTGGAGCCTTTTCTTCCGACACTATGAAGTTTTGGATTTAAAGCCA
AATGGCAAAGTTGCATCCGTGGAAATGGTTAAATATCATCCTGTGGGATGAACCCCTGCACGCCCTCTATGAC
AATGTGGAGAAACTCTTTCCAGGTTTTGAGATAGAAACTGTGAAGAACAACCTCAGGATCCTTTTTAATAATGCT
GTAAAGAAACGTTTGATGACAGACAGAAGGATTGGCTGCCTTTTATCAGGGGGCTTGGACTCCAGCTTGGTTGCT
GCCACTCTGTTGAAGCAGCTGAAAGAAGCCCAAGTACAGTATCCTCTCCAGACATTTGCAATTGGCATGGAAGAC
AGCCCCGATTTACTGGCTGCTAGAAAGGTGGCAGATCATATTGGAAGTGAACATTATGAAGTCCTTTTTAACTCT
GAGGAAGGCATTACAGGCTCTGGATGAAGTCATATTTTCTTGGAAACTTATGACATTACAACAGTTCGTGCTTCA
GTAGGTATGTATTTAATTTCCAAGTATATTCCGAAGAACACAGATAGCGTGGTGATCTTCTCTGGAGAAGGATCA
GATGAACTTACGCAGGGTTACATATATTTTACAAGGCTCCTTCTCCTGAAAAAGCCGAGGAGGAGAGTGAGAGG
CTTCTGAGGGAACTCTATTTGTTTGATGTTCTCCGCGCAGATCGAACTACTGCTGCCCATGGTCTTGAACCTGAGA
GTCCCATTTCTAGATCATCGATTTTCTTCCCTATTACTTGTCTCTGCCACCAGAAATGAGAATTTCAAAGAATGGG
ATAGAAAAACATCTCCTGAGAGAGACGTTTGAGGATTCCAATCTGATACCCAAAGAGATTCTCTGGCGACCAAAA
GAAGCCTTCAGTGATGGAATAACTTCAGTTAAGAATTCCTGGTTTAAGATTTTACAGGAATACGTTGAACATCAG
GTTGATGATGCAATGATGGCAAATGCAGCCCAGAAATTTCCCTTCAATACCTCTAAAACCAAAGAAGGATATTAC
TACCGTCAAGTCTTTGAACGCCATTACCCAGGCCGGGCTGACTGGCTGAGCCATTACTGGATGCCCAAGTGGATC
AATGCCACTGACCTTCTGCCCGCACGCTGACCCACTACAAGTCAGCTGTCAAAGCTTAGGTGGTCTTTATGCTG
TAATGTGAAAGCAAATATTTCTTCGTGTTGGATGGGGACTGTGGGTAGATAGGGGAACAATGAGAGTCAACTCAG
GCTAACTTGGGTGTGAAAAAATAAAAGTCCATAAATCTAAAAA

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FIGURE 2358

MCGIWALFGSDDCLSVQCLSAMKIAHRGPDAFRFENVNGYTNC CFGHRLAVVDPLFGMQPIRVKKYPYLWLCYN
GEIYNHKKMQQHFEFEYQTKVDGEIILHLYDKGGIEQTICMLDGVFAFVLLDTANKKVFLGRDYGVRPLFKAMT
EDGFLAVCSEAKGLVTLKHSATPFLKVEPFLPGHYEVLDLKPNGKVASVEMVKYHHRDEPLHALYDNVEKLFPG
FEIETVKNNLRILFNNAVKKRLMTDRRIGCLLSGGLDSSLVAATLLKQLKEAQVQYPLQTF AIGMEDSPDLLAAR
KVADHIGSEHYEVLFNSEEGIQALDEVIFSLETYDITTVRASVGMYLISKYIRKNTDSVVIFSGEGSDELTQGYI
YFHKAPSPEKAEESERLLRELYLFDVLRADRTTAHGLELRVPFLDHRFSSYYLSLPPEMRIPKNGIEKHLRE
TFEDSNLIPKEILWRPKEAFSDGITSVKNSWFKILQEYVEHQVDDAMMANAAQKFPFNTPKTKEGYYYRQVFERH
YPGRADWLSHYWMPKWINATDPSARTLTHYKSAVKA

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FIGURE 2359

CCTGGCTGGGACGGAAGTTGCACCACAAGTACAATTAGTTTCAGTTTTGTTTCTTTTCCAGGCACCCAGCAACGG
CGGCCTCCAGGCCTCAGGCCCCCTCACCATCCTAGAGGTCAAGATCAGCTCTGGCTAGTTCTCACAGGTCTGACC
CAACAAGTAGCACTGACATTTTTACGTTTGCTGGATGTACACACGGAAGTGGAGGAGGAGGAGGAGAAGGAGGAG
GGCAGCTCCTTAGCTCAAGAGCAAGTGGCCCCAAGGCCTCAGAAGACTAGAAGGAAGTTCCTGGCCATTGAGCATG

GTTTCCCACGGGTCTCTGCCCTCCCTCCTGGAGGCCCTGAGCAGCGACTTCCTGGCCTGTAAAATCTGCCTGGAG
CAGCTGCGGGACCCCAAGACACTGCCCTGCCTGCATACCTACTGCCAAGACTGCCTGGCACAGCTGGCGGATGGC
GGCCGCGTCCGCTGCCCCGAGTGCCGCGAGACAGTGCCTGTGCCGCCGAGGGTGTGGCCTCCTTCAAGACCAAC
TTCTTCGTCAATGGGCTGCTGGACCTGGTGAAGGCCCGGGCCTGTGGAGACCTGCGTGCCGGGAAGCCAGCCTGT
GCCCTGTGTCCCTGGTGGTGGCACCAGCACCGGGGGGGCCGGCCACGGCCCGGTGCCTGGACTGTGCCGATGAC
TTGTGCCAGGCCTGTGCCGACGGGCACCGCTGCACCCGCCAGACCCACACCCACCGCGTGGTGGACCTGGTGGGC
TACAGGGCCGGGTGGTATGATGAGGAGGCCCGGGAGCGCCAAGCGGCCAGTGTCCCCAGCACCCCGGGGAGGCA
CTGCGCTTCTGTGCCAGCCCTGCTCAGATTGCTGTGCAGAGAGTGCCTGCTAGACCCACCTGGACCACCC
TGCTGCCTCTGGCTGAAGCTGTGCGTGCCCGGAGGCCGGGCTGGAGGGACTGCTGGCCGGTGTGGACAATAAC
CTGGTGGAGCTGGAGGCAGCGCGGAGGGTGGAGAAGGAGGCGCTAGCCCGGCTGCGGGAGCAGGCGGCCCGGGT
GGGACTCAGGTGGAGGAGGCGGCTGAGGGCGTCTCCGGGCCCTGCTGGCCAGAAGCAGGAGGTGCTGGGGCAG
CTACGAGCCACGTGGAGGCTGCCGAAGAAGCTGCTCGGGAGAGGCTGGCGGAGCTTGAGGGCCGGGAGCAGGTG
GCCAGGGCCGCGAGCCGCTTCGCCCCCGGGTACTCAGCCTGGGGCGAGAGGCCGAGATCCTCTCCCTGGAAGGG
GCGATCGCACAGCGGCTCAGGCAGCTGCAGGGCTGCCCCTGGGCACCAGGCCCGGGCCCCCTGCCTGCTCCACAG
CTGGAGCTCCATCCTGGGCTCCTGGACAAGAAGTGCACCTTCTTCGGCTGTCTTTGAGGAGCAGCAGCCCCAG
AAGGATGGTGGGAAAGACGGAGCTGGTACCCAGGGAGGTGAGGAGAGCCAGAGCCGGAGGGAGGATGAGCCGAAG
ACTGAGAGACAGGGTGGAGTCCAGCCCCAGGCTGGAGATGGAGCCAGACCCCAAAAGAGGAAAAAGCCAGACA
ACCCGAGAAGAGGGAGCCAGACCTTGAGGAGGACAGGGCCCAGACACCCACGAGGATGAGGAGCCCGAGCCC
CACAGGGGTGGCAGACCCAACAAGAAGAAAAAGTTCAAAGGCAGGCTCAAGTCAATTTCCGGGAGCCAGCCCA
GCCCTGGGGCCGAATCTGGACGGCTCTGGCCTCCTCCCCAGACCATCTTTTACTGCAGTTTCCCCACGCGGATG
CCTGGAGACAAGCGGTCCCCCGGATCACCGGCTCTGTCCCTTCGGTCCCCGGGAGATCCTGGTGGCGGATGAG
CAGAACCGGGCACTGAAACGCTTCTCCCTCAACGGCGACTACAAGGGCACCGTGCCGGTCCCTGAGGGCTGCTCC
CCTTGACGCTGGCCGCCCTGCAGAGCGCGGTGGCCTTCTCCGCTAGCGCACGGCTCTATCTCATCAACCCCAAC
GGCGAAGTGAGTGGCGCAGGGCCCTGAGCCTCTCCAGGCCAGCCACGCGGTGGCGGCACTGCCTAGCGGGGAC
CGCGTGGCTGTACGCTGGCGGGCCACGTGGAGGTGTACAATATGGAAGGCAGCCTGGCCACCCGGTTTATTCTT
GGAGGCAAGGCCAGCCGGGGCTGCGGGCGCTGCTGTTTCTGACCACAGCCCCAGGGGCATTTCTGTTGGGTGCG
GACTGGCAGCAGAAATAGTGTGTAATCTGTGATGGGCTGGGCCAGGTGGTTGGGGAGTACAAGGGGCCAGGCCTG
CATGGCTGCCAGCCGGGCTCCGTGTCTGTGATAAGAAGGGCTACATCTTTCTGACCCTTCGAGAAGTCAACAAG
GTGGTGATCCTGGACCCGAAGGGGTCCCTCCTTGGAGACTTCTTGACAGCCTACCACGGCCTGGAAGGCCCGG
GTTACCACCATGGTGGATGGCAGGTACCTGGTCTGTCCCTCAGTAACGGGACCATCCACATCTTTCGGGTCCGT
TCTCCGGACAGTTAAAGGGGCTAGGACTAGGGTGGAGGGAGTGGGGAGGAGAGGGCAGGAAGGAGGCAGAGCT
GTCCGTGGGAGGTGGAGGCCGAGGACATTTTCTGAAGGGCAGGGGTGGCAACTTTTCAACATGGAGTGCCAAA
CTGCTAACCCGTCTTCTAGTGTGTGAGAATAGGGACCAAGGTGGTGGCGTGACCTTAACCTCTCAGAAGCAGAGGA
GGCAGGTGGGTGGAGGGGGATGCTGGGAGTTACCTGCCTCTTGCTTTTGTGGGTGGCTGCTGCCACCACCGCC
GCTGCTATATAGTTTAGGTTTCTGAGGTTTGTGAGCCTGTCTGCTTTTGCACTCTTCAAACCATTCCTGATAGA
GTAGCCGAGGGAGAGTCTTGGGGCCAAGAAGGGCCAGGGTGGGTGAGCGTGTGCACTGTGGAACAGAGCTGAG
ACCCCGGCCCCCTTGGACTGGCACAGGGTCTACAGAGTCAGAGGAGGCTGAGATTTGGAATGGGCAGTGAAT
GGCCTCTTCTGCCAGCCACAGGCAGGATGCTCCTTGATCACGGCATCCCCGGCGGTAGTACAGGGTGAGCTTGC
AGGAGGGTCTGCAAGTGCAGACAGCAGCTGGGGCCAAAGAGGTGTTAGGTTCAAAGGCTGCGAAGAGAATAGGCT
ACTGGA AAAACCAAACCAACAGAATTCAGTCCAAAATCCACATTCTCCATCGCTTCTCAGCCTTTTGGCTAAG
ATTAAGTATTAAAAAAAACCAGGCTCTGCCAGGCGCAGTGGCTCATGCCTATAATCCCGGCACTTTGGGAGTCT
GTGGCAGGAGGATTGCTTGAGGCCAGGAGTTTGAGACCAGCCTGGGCAACATAGCGAGACCCCATCTCTACAAA
GATTAAAAAATTAGCTGCGTGTAGTAGCATATGCCTTTCAACGTAGCTACTCAGGAGGCTGAGGTGGGAGGATCC
TTGAGCCGAGGAGTTTGAGTCTGCAGTGAGCTATGATCGCACCACTGCATTCCAGACCCCATCTCG

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FIGURE 2360

MVSHGSSPSLLEALSSDFLACKICLEQLRAPKTLPC LH TYCQDCLAQLADGGRVRCPECRETVPVPPEGVASFKT
NFFVNGLLDLVKARACGDLRAGKPACALCPLVGGTSTGGPATARCLDCADDLCQACADGHRCTRQTHTHRVDLV
GYRAGWYDEEARERQAAQCPQHPGEALRFLCQPCSQLLCRECRLDPHLDHPCLP LAEAVRARRPGLEGLLAGVDN
NLVELEAARRVEKEALARLREQAARVGTQVEEAAEGLRALLAQKQEV LGQLRAHVEAAEEAARERLAELEGREQ
VARAAAAFARRVLSL GREAEILSLEGAIAQRLRQLQGCPWAPGPAPCLLPQLELHPGLLDKNCHLLRLSFEEQQP
QKDGKDGAGTQGGEESQSRREDEPKTERQGGVQPQAGDGAQTPKEEKAQTTREEGAQTLEEDRAQTPHEDGGPQ
PHRGGRPNKKKKFKGRLKSI SREPSPALGPNLDGSGLLPRIFYCSFPTRMPGDKRSPRITGLCPFGPREILVAD
EQNRALKRFSLNGDYKGTVPVPEGCSPCSVAALQSAVAFSASARLYLINPNGEVQWRRALSLSQASHAVAALPSG
DRVAVSVAGHVEVYNMEGSLATRFIPGGKASRGLRALVFLTTSPQGHFVGSDWQONSVVICDGLGQVVGEYKGPG
LHGCQPGSVSVDKKG YIFLTLREVNKV VILDPKGSLLGDFLTAYHGLEKPRVTMVDGRYL VVSLSNGTIHIFRV
RSPDS

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FIGURE 2361

GAATTCCTGCAGCTCAGCAGCCGCCGCGCCAGAGCAGGACGAACCGCCAATCGCAAGGCACCTCTGAGAACTTCAGG
ATGCAGATGTCTCCAGCCCTCACCTGCCTAGTCCTGGGCCTGGCCCTTGTCTTTGGTGAAGGGTCTGCTGTGCAC
CATCCCCATCCTACGTGGCCACCTGGCCTCAGACTTCGGGGTGAGGGTGTTCAGCAGGTGGCGCAGGCCCTCC
AAGGACCGCAACGTGGTTTTCTCACCCTATGGGGTGGCCTCGGTGTTGGCCATGCTCCAGCTGACAACAGGAGGA
GAAACCCAGCAGCAGATTCAAGCAGCTATGGGATTCAAGATTGATGACAAGGGCATGGCCCCCGCCCTCCGGCAT
CTGTACAAGGAGCTCATGGGGCCATGGAACAAGGATGAGATCAGCACCACAGACGCGATCTTCGTCCAGCGGGAT
CTGAAGCTGGTCCAGGGCTTCATGCCCCACTTCTTCAGGCTGTTCCGGAGCACGGTCAAGCAAGTGGACTTTTCA
GAGGTGGAGAGAGCCAGATTTCATCATCAATGACTGGGTGAAGACACACACAAAAGGTATGATCAGCAACTTGCTT
GGGAAAGGAGCCGTGGACCAGCTGACACGGCTGGTGTGTTGAATGCCCTCTACTTCAACGGCCAGTGGAAAGACT
CCCTTCCCCGACTCCAGCACCCACCGCCGCTCTTCCACAAATCAGACGGCAGCACTGTCTCTGTGCCATGATG
GCTCAGACCAACAAGTTCAACTATACTGAGTTCACCACGCCCCGATGGCCATTACTACGACATCCTGGAAGTCCCC
TACCACGGGGACACCCTCAGCATGTTTATTGCTGCCCTTATGAAAAGAGGTGCCCTCTCTGTGCCCTCACCAAC
ATTCTGAGTGCCAGCTCATCAGCCACTGGAAAGGCAACATGACCAGGCTGCCCCGCCCTCTGGTTCTGCCCCAAG
TTCTCCCTGGAGACTGAAGTCGACCTCAGGAAGCCCCCTAGAGAACCTGGGAATGACCGACATGTTTCAGACAGTTT
CAGGCTGACTTCACGAGTCTTTTCAGACCAAGAGCCTCTCCACGTCGCGCAGGCGCTGCAGAAAGTGAAGATCGAG
GTGAACGAGAGTGGCACGGTGGCCTCCTCATCCACAGCTGTCTAGTCTCAGCCCGCATGGCCCCGAGGAGATC
ATCATGGACAGACCCTTCTCTTTGTGGTCCGGCACAACCCACAGGAACAGTCCTTTTCATGGGCCAAGTGATG
GAACCCTGACCCTGGGGAAAGACGCCTTCATCTGGGACAAAACCTGGAGATGCATCGGGAAAGAAGAACTCCGAA
GAAAAGAATTTTAGTGTTAATGACTCTTTCTGAAGGAAGAGAAGACATTTGCCTTTTGTAAAGATGGTAAAC
AGATCTGTCTCCAAGACCTTGGCCTCTCCTTGGAGGACCTTTAGGTCAAACCTCCCTAGTCTCCACCTGAGACCCT
GGGAGAGAAGTTTGAAGCACAACCTCCCTTAAGGTCTCCAAACCAGACGGTGACGCTGCGGGACCATCTGGGGCA
CCTGCTTCCACCCGTCTCTCTGCCCCTCGGGTCTGCAGACCTGGTTCCTGAGGCCCCCTTTCAGGATGGAAAC
TACGGGGCTTACAGGAGCTTTTGTGTGCCTGGTAGAACTATTTCTGTTCCAGTCACATTGCCACTCACTCTTGTA
CTGCCTGCCACCGCGGAGGAGGCTGGTGACAGGCCAAAGGCCAGTGGAAGAAACACCCTTTTCATCTCAGAGTCCA
CTGTGGCACTGGCCACCCCTCCCCAGTACAGGGGTGCTGCAGGTGGCAGAGTGAATGTCCCCCATCATGTGGCCC
AACTCTCCTGGCCTGGCCATCTCCCTCCCCAGAAACAGTGTGCATGGGTTATTTTGGAGTGTAGGTGACTTGTTT
ACTCATTGAAGCAGATTTCTGCTTCTTTTATTTTATAGGAATAGAGGAAGAAATGTCAGATGCGTGCCCAGCT
CTTACCCCCCAATCTCTTGGTGGGGAGGGGTGTACCTAAATATTTATCATATCCTTGCCCTTGAGTGCTTGTTA
GAGAGAAAGAGAACTACTAAGGAAAATAATATTATTTAAACTCGCTCCTAGTGTTCCTTTGTGGTCTGTGTACC
GTATCTCAGGAAGTCCAGCCACTTGACTGGCACACACCCTCCGGACATCCAGCGTGACGGAGCCACACTGCCA
CCTTGTGGCCGCTGAGACCCTCGCGCCCCCGCGCCCCCGCGCCCCTCTTTTCCCCTTGATGGAAATTGACC
ATACAATTTTCATCCTCCTTCAGGGGATCAAAGGACGGAGTGGGGGACAGAGACTCAGATGAGGACAGAGTGGT
TTCCAATGTGTTCAATAGATTTAGGAGCAGAAATGCAAGGGGCTGCATGACCTACCAGGACAGAACTTTCCCCAA
TTACAGGGTGACTCAGACCCGATTGGTGACTCACTTCAATGTGTCAATTTCCGGCTGCTGTGTGTGAGCAGTGGA
CACGTGAGGGGGGGGTGGGTGAGAGAGACAGGCAGCTCGGATTCAACTACCTTAGATAATATTTCTGAAAACCTA
CCAGCCAGAGGGTAGGGCACAAAGATGGATGTAATGCACTTTGGGAGGCCAAGGCGGGAGGATTGCTTGAGCCCA
GGAGTTCAAGACCAGCCTGGGCAACATACCAAGACCCCGTCTCTTTAAATATATATATATTTTAAATATACTTA
AATATATATTTCTAATATCTTTAAATATATATATATATTTTAAAGACCAATTTATGGGAGAATTGCACACAGATG
TGAAATGAATGTAATCTAATAGAAGC

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FIGURE 2362

MQMSPALTCLVLGLALVFGEGSAVHHPPSYVAHLASDFGVRVFQQVAQASKDRNVVFS
PYGVASVLAMLQLTTGG
ETQQQIQAMGFKIDDKGMALRHLYKELMGPWNKDEISTDAIFVQRDLKLVQGFMPHFF
RFLFRSTVKQVDFS
EVERARFIINDWVKTHTKGMISNLLGKGAVDQLTRLVLVNALYFNGQWKTPFPDSST
HRRLFHKSDGSTVSVPM
AQTNKFNYTEFTTPDGHYYDILELPYHGDTLSMFIAAPYEKEVPLSALTNILSAQLI
SHWKGNMTRLPRLLVLPK
FSLETEVDLRKPLENLGMTDMFRQFQADFTSLSDQEPLHVAQALQVKIEVNESGTV
ASSSTAVIVSARMAPEEI
IMDRPFLFVVRHNPTGTIVLFMGQVMEP

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FIGURE 2363

GTGGGACGCGCCGAGCCGGAGGCTGCAGGATGATGCGGTTTCATGCTATTATTCAGCCGGCAGGGAAAAC TGCGGC
TGCAAAAATGGTACCTGGCCACTTCGGACAAGGAACGGAAGAAGATGGTGCGCGAGCTCATGCAGGTTGTCCTGG
CTCGAAAGCCCCAAGATGTGCAGCTTCCTGGAGTGGAGGGACCTCAAAGTTGTCTATAAGAGATATGCCAGCCTCT
ACTTCTGCTGCGCCATCGAGGGCCAAGACAATGAGCTCATCACACTGGAGCTGATCCACCGATACGTGGAGCTCT
TAGACAAATACTTTGGCAGTGTGTGCGAGCTGGACATCATCTTCAACTTTGAGAAGGCCTACTTCATCCTGGATG
AGTTTTTGTATGGGGGGGGATGTCCAGGACACCTCCACTTTCCCTTTTCCCACTGAAGGTTTTAGAAAGCTAGGAG
GCAGGAAAATGTGACCCAGATGGGGGTGCTATTTGGCTTTTATTCCTGCCTTTGCAGAACTGATGTCACCCAG
ATGTCCTTCCCTCCCTAATAACTGTAAATATATAAATATGTGAGGTTAAAGGGAAAAGGTGTTGAGGGCACTTCT
TGTCTCTCTGTCCCATAACCTACCTCCACCCTCCCCCTAGCCAGCCAGGCAGCTTCTGCTGCTGGGAGGGGAGC
CTGGACCCCCCTCTTTCTCCTTGGCTGCAGTGGGGCCTTTATCCAGTGCCAGGGAGGAACAACATAGTTAATTTT
TTTCTAACCTTGCCACTTTGAGGGAAGGAAGGGTTGGGGGAAGGGCAAGCTTTATGGGACCCTGGTCCTGGCCCT
GGCCTTTCACTCCAGTTCTGGGTGAGGCAGGAGCTGGGAGGGGTGGGGAGGGGAGGGGGAAGTGTCTGCCTTTA
TGTCTTTCTTCTGAAATAAAAGGAAAAGCATTCTGGAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2364

MMRFMLLSRQGKRLRLQKWYLATSDKERKKMVRELMQVVLARKPKMCSFLEWRDLKVVKRYASLYFCCAIEGQD
NELITLELIHRYVELLDKYFGSVCELDIIFNFEKAYFILDEFMGGDVQDTSTFPFSH

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FIGURE 2365

GTGGGACGCGCCGAGCCGGAGGCTGCAGGATGATGCGGTTTCATGCTATTATTCAGCCGGCAGGGAAAACTGCGGC
TGCAAAAATGGTACCTGGCCACTTCGGACAAGGAACGGAAGAAGATGGTGCGCGAGCTCATGCAGGTTGTCCCTGG
CTCGAAAGCCCAAGATGTGCAGCTTCCTGGAGTGGAGGGACCTCAAAGTTGTCTATAAGAGATATGCCAGCCTCT
ACTTCTGCTGCGCCATCGAGGGCCAAGACAATGAGCTCATCACACTGGAGCTGATCCACCGATACGTGGAGCTCT
TAGACAAATACTTTGGCAGTGTGTGCGAGCTGGACATCATCTTCAACTTTGAGAAGGCCTACTTCATCCTGGATG
AGTTTTTGTATGGGGGGGGATGTCCAGGACACCTCCAAGAAGAGTGTGCTGAAAGCCATCGAGCAGGCTGACCTAC
TGCAAGAGGAGGATGAGTCGCCACGGAGTGTGCTGGAGGAGATGGGTTTGGCATAGCCCCCTGCTGGGCCGGGGTG
TGGCGATGGGGTCCTGGCAGCGTGGCGGGAACGGCTGCTTCTCCTCTGCCCAGGGCCCTGTTCTTGGTGGGACTC
GGCTGCCCCCTCCTC

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FIGURE 2366

MMRFMLLFSRQGKLRQLQKWYLATSDKERKKMVRELMQVVLARKPKMCSFLEWRDLKVVKRYASLYFCCAIEGQD
NELITLELIHRYVELLDKYFGSVCELDIIFNFEKAYFILDEFILMGGDVQDTSKKSVLKAIEQADLLQEEDESPRS
VLEEMGLA

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FIGURE 2367

CCAGCGTGCTGAAGCCGGAGCGAGCTAGCCGCCCGGAGCCGCGCCGACCCAGCTGAGCCCAGCCCACGGGACGCC
AGACCTCGACCGTCGCTCCTACCCCGGCCACCGCTCGGAGCCGAGGCGGACGCGTCCCGATCTTCCCCTGTCCCC
ACCCTGCCCCGACCTCCTCTCCACCTCTCGCGTCGTGACACCAGCGTCTCCGGCAGCCTCTTGGTCAATGAAAGC
CCTCAGATTGTGGGCTTCCGCCCTCTTCTGCCCTTCTGCTGATCAACGGGTAGGGGCAGCACCCCTGGTCGCCC
TGAGGCGCAGCCTCCTCCTCTCAGCTCTGAGCATAAAGAGCCGGTAGCCGGGGACGAGTGCCCGGGCCAAAGGA
TGGCAGCGCCCCAGAGGTCGAGGCGCTCGGAATTCCGAGCCGAGGACGAGGGAGAGCTTTTCCAGGGCGTGGA
TCCCCGGGCGCTGGCCGCGGTGCTGCTGCAGGCACTCGACCGTCCCGCTCACCCCGGCACCAAGCGGCTCCCA
GCAGGGGCCGGAGGAAGAAGCAGCTGAAGCTCTGCTGACCGAGACCGTGCGCAGCCAGACCCACAGCCTCCCGGC
GCCGGAGAGCCCGGAGCCCGCGGCTCCGCCCTCGCCCTCAGACTCCGGAGAATGGGCCCCGAGGCGAGCGATCCCTC
CGAGGAGCTCGAGGCGCTAGCGTCCCTGCTCCAGGAATGCGAGATTTAGTCCAAGTAGCGCCAAGCGCCAGCA
GGAGACGGCGGCAGCAGAGACGGAAACCCGCACGCACACGCTGACCCGAGTGAATCTGGAGAGCCCGGGGCCAGA
GCGCGTATGGCGCGCTTCTGGGGAGAGTTCCAGGCGCGTGTCCCGGAGCGCGCGCCCTGCGGCCCCCGGGCCCC
CTCTCAATTCCAGGCGCGTATGCCCGACAGCGGGCCCCCTTCCCGAAAACCAAGTTCGGGGGAAGGAGTGTCTC
CCCCAAAACACACCTAGGCGAGGCATTGGCACCCCTGTCCAAGGCGTACCAAGGCGTGGCCGCCCCGTTCCCCAA
GGCGCGCGGGCCGGAGAGCGCACTCCTGGGCGGCTCCGAGGCGGGCGAGCGCTTCTCCAGCAAGGGCTGGCGCA
GGTGGAGGCCGGGCGGCGGAGGCGGAGGCCACGCGGAGGCGCGGCGCAGGAAGAGCGGCTGGCCGACCTCGC
CTCGGACCTGCTGCTCCAGTATTGCTGCGAGGGCGGGCCCCGGCAGCGCGGCTCGGGGGTTCGGGGGCTGCAGGA
GGCGGCGGAGGAGCGAGAGAGTGCAAGGGAGGAGGAGGAGGCGGAGCAGGAGAGACGCGGCGGGGAGGAGAGGGT
GGGGGAAGAGGATGAGGAGGCGGCCGAGGCGGAGGCGAGGCGGAGGAGGCGGAGAGGGCGCGCAGAACGCGCT
CCTGTTCCGGAGGAGGAGGACGGGGAAGCCGCGCCGAGGACAAGCGCTCCAGGAGGAGACGCCGGGCCACCG
GCGGAAGGAGGCCGAGGGGACAGAGGAGGGCGGGGAGGAGGAGGACGACGAGGAGATGGATCCGCAGACGATCGA
CAGCCTCATTTAGCTGTCCACCAAACCCACCTGCCAGCGGACGACGTGGTCAGCATCATCGAGGAGGTGGAGGA
GAAGCGGAAGCGGAAGAAGAACGCCCTCCCGAGCCCGTGCCGCCCCCCCCGTGCCGCCCCCGCCCCACCCACGT
CCGCTCCCCCGAGCCCCCGCCCCCGCCCCCGCTCCCGCAGAGACGAGCTGCCGGACTGGAACGAGGTGCTCCC
GCCCTGGGATCGGGAGGAGGACGAGGTGTACCCGCCAGGGCCGTACCACCTTTCCCCAACTACATCCGGCCGCG
GACACTGCAGCCGCCCTCGGCCTTGCGCCGCCGCACTACCACCACGCCTTGCCGCCTTCGCGCCACTATCCCGG
CCGGGAGGCCCAGGCGCGGCGCGCAGGAGGAGGCGGAGGCGGAGGAGCGCCGGCTGCAGGAGCAGGAGGAGCT
GGAGAATTACATCGAGCACGTGCTGCTCCGGCGCCCGTGACTGCCCTTCCCGGTCCCGCCCCGCGCGCCCCGCG
CGCGCGCGCGCGCGCGCCCCCTCCGTGTTGCCCGCTCCCCCTCGGTGTTTGATGCGCCCCGCCCCGTGCCCC
TTGGCCCTGCCCCGTGCCCCGGGCTGCGTCGGGACCTGCCAGACCCCCCTCCCGGTCTGAGCCGAACCTCCCA
GAGCTACCCGCGGGTGACCGGGGGCCAGCCAGGAGGGCGGGTGGTTTGTGCGAGTTCCCTTGCCACGCGGGG
CCCGGCCCCATCAAGTCCCTCTGGGGACGTCCCGTCGGAAACCGGAAAAAGCAGTTCCAGTTAATTGTGTGAAG
TGTGTCTGTCTCCAGCCCTTCGGGCTCCACAGAGCCCCCTCCAGCCTCTCCAAGTCGCTGTGAATTGACCCCTTC
TTTCCTTTCTCTGTTGTAAATACCCCTCACGGAGGAAATAGTTTTGCTAAGAAATAAAAGTGACTATTTT

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FIGURE 2368

MKALRLSASALFCLLLINGLGAAPPGRPEAQPPPLSSEHKEPVAGDAVP GPKDGSAP EVRGARNSEPQDEGELFQ
GVDPRALAAVLLQALDRPASPPAPSGSQQGPEEEAAEALLTETVRSQTHSLPAPESPEPAAPPRPQTPENGPEAS
DPSEEELEALASLLQELRDFSPSSAKRQQETAAETETRTHTLTRVNLESFGPERVWRASWGEFQARVPERAPLPP
PAPSQFQARMPDSGPLPETHKFGEGVSSPKTHLGEALAPLSKAYQGVAAPFPKARRPESALLGGSEAGERLLQQG
LAQVEAGR RQAEATRQAAAQEERLADLASDLLLQYLLQGGARQ RGLGGRGLQEAAEERESAREEEEEAEQERRGGE
ERVGEEDDEAAEAEAEAEAEERARQNALLFAEEEDGEAGAEDKRSQEETPGHRRKEAEGTEEGGEEEDDEEMDPQ
TIDSLIELSTKLHLPADDVVSIIIEVEEKRRKKKNAPPEPVFPFRAAPAPTHVRSPQPPPPAPAPARDEL PDWNE
VLPPWDREEDVYPPGPYHPFPNYIRPRTLQPPSALRRRRHYHHALPPSRHYPGREAAQARRAQEEAEAEERRLQEQ
EELENYIEHVLLRRP

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FIGURE 2369

GGCACGAGGGCTTCCACATGTGTCAAGCGGCTGGCTCAGCCCAGAGTCCCTGTCTCCCGCCCGCCGGCCCGAGCC
GCCGCCCCCTCCCCGCCTCCCGTGCGCCCGGACAACTCTCGCTTGTCTGTGGCGCCGGCATCTGGAGCTTTCT
GTAGCCTCCGGATACGCCTTTTTTTCAGGGCGTAGCCCCAGCCAAGCTGCTCCCCGCGGCGGCCGCACAGCAGCC
CGAGCGCCCCCTTCCGGAGCTCCCTCCGGAGCTGGGATCCAGGCGCGTAGCGGAGATCCCAGGATCCTGGGTG
CTGTCTGGGCCCCGTCCCCACCAATGACCTCCTCGGGGCTGGACCCCGGTTCTGTCTGTCTGCCGCTGTCTGCT
GCCCCCTGCGGCTCAGCCTCCGACCGGCCCCGGGGCCGAGACCCGGTCAACCCAGAGAAGCTGCTGGTGATCAC
TGTGGCCACAGCTGAAACCGAGGGGTACCTGCGTTTCTGCGCTCTGCGGAGTTCTTCAACTACACTGTGCGGAC
CCTGGGCCTGGGAGAGGAGTGGCGAGGGGTGATGTGGCTCGAACAGTTGGTGGAGGACAGAAGGTCCGGTGGTT
AAAGAAGGAAATGGAGAAATACGCTGACCGGGAGGATATGATCATCATGTTTGTGGATAGCTACGACGTGATTCT
GGCCGGCAGCCCCACAGAGCTGCTGAAGAAGTTCTCCAGAGTGGCAGCCGCTGCTCTTCTCTGAGAGAGCTT
CTGCTGGCCCCAGTGGGGGCTGGCGGAGCAGTACCCTGAGGTGGGCACGGGGGAAGCGCTTCTCAATTCTGGTGG
ATTATCGGTTTTTGCCACCACCATCCACCAAATCTGCGCCAGTGGAAAGTACAAGGATGATGACGACGACCAGCT
GTTCTACACACGGCTCTACCTGGACCCAGGACTGAGGGAGAAACTCAGCCTTAATCTGGATCATAAGTCTCGGAT
CTTTCAGAACCTCAACGGGGCTTTAGATGAAGTGGTTTTAAAGTTTGATCGGAACCGTGTGCGTATCCGGAACGT
GGCCTACGACACGCTCCCCATTGTGGTCCATGGAAACGGTCCCCTAAGCTGCAGCTCAACTACCTGGGAAACTA
CGTCCCCAATGGCTGGACTCCTGAGGGAGGCTGTGGCTTCTGCAACCAGGACCGGAGGACACTCCCGGGGGGCA
GCCTCCCCCCCCGGGTGTTTTCTGGCCGTGTTTGTGGAACAGCCTACTCCGTTTCTGCCCCGCTTCTGACGCGGT
GCTACTCCTGGACTATCCCCCGACAGGGTCACCTTTCTCTGCACAACAACGAGGTCTTCCATGAACCCACAT
CGCTGACTCCTGGCCGACGCTCCAGGACCACTTCTCAGCTGTGAAGCTCGTGGGGCCGGAGGAGGCTCTGAGCCC
AGGCGAGGCCAGGGACATGGCCATGGACCTGTGTGCGGAGGACCCGAGTGTGAGTTCTACTTCAGCCTGGACGC
CGACGCTGTCTCACCACCTGCAGACCTGCGTATCCTCATTTAGGAGAACAGGAAGGTGATCGCCCCCATGCT
GTCCCGCCACGGCAAGCTGTGGTCCAACCTTCTGGGGCGCCCTGAGCCCCGATGAGTACTACGCCGCTCCGAGGA
CTACGTGGAGCTGGTGCAGCGGAAGCGAGTGGGTGTGTGGAATGTACCATACATCTCCCAGGCCTATGTGATCCG
GGGTGATACCTGCGGATGGAGCTGCCCCAGAGGGATGTGTTCTCGGGCAGTGACACAGACCCGGACATGGCCTT
CTGTAAGAGCTTTCGAGACAAGGGCATCTTCTCCATCTGAGCAATCAGCATGAATTTGGCCGGCTCCTGGCCAC
TTCCAGATACGACACGGAGCACCTGCACCCCGACCTCTGGCAGATCTTCGACAACCCCGTCGACTGGAAGGAGCA
GTACATCCACGAGAACTACAGCCGGGCCCTGGAAGGGGAAGGAATCGTGGAGCAGCCATGCCCGGACGTGTACTG
GTTCCCACTGCTGTGAGAACAAATGTGTGATGAGCTGGTGGCAGAGATGGAGCACTACGGCCAGTGGTCAGGCGG
CCGGCATGAGGATTCAAGGCTGGCTGGAGGCTACGAGAAATGTGCCCACCGTGGACATCCACATGAAGCAGGTGGG
GTACGAGGACCAGTGGCTGCAGCTGCTGCGGACGTATGTGGGCCCCATGACCGAGAGCCTGTTTCCCGGTTACCA
CACCAAGGCGCGGGCGGTGATGAACCTTGTGGTTCGCTACCGGCCAGACGAGCAGCCGTCTCTGCGGCCACACCA
CGACTCATCCACCTTCACCCTCAACGTTGCCCTCAACCAAGGGCCTGGACTATGAGGGAGGTGGCTGCCGCTT
CCTGCGCTACGACTGTGTGATCTCCTCCCCGAGGAAGGGCTGGGCACTCCTGCACCCCGGCCGCTCACCCTA
CCACGAGGGGCTGCCAACGACCTGGGGCACACGCTACATCATGGTGTCTTTGTGACCCCTGACACTCAACCAC
TCTGCCAAACCTGCCCTGCCATTGTGCCTTTTTAGGGGGCCTGGCCCCCGTCTGGGAGTTGGGGGATGGGTCTC
TCTGTCTCCCCACTTCTGAGTTCAGTTCGCGGTGCCTGAACTGAATATGTACCTTGCTCCCAAGACACGGCC
CTCTCAGGAAGCTCCCGGAGTCCCCGCTCTCTCTCTCCGCCACAGGGGTTCTGTTGGGACAGGGCTTCTGGGGAC
TCCCCGCGTGATAAATTATTAATGTTCCGCGAGTCTCACTCTGAATAAAGGACAGTTTGTAAAAA

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FIGURE 2370

MTSSGPGPRFLLLLPLLLPPAASASDRPRGRDPVNPEKLLVITVATAETEGYLRFLRSAEFFNYTVRTLGLGEEW
RGGDVARTVGGGQKVRWLKKEMEKYADREDMIIMFVDSYDVILAGSPTELLKKFVQSGSRLLFSAESFCWPEWGL
AEQYPEVGTGKRFLNSGGFIGFATTIHQIVRQWKYKDDDDQLFYTRLYLDPGLREKLSLNLDHKSRIQNLNGA
LDEVVLKFDNRNRVIRNVAYDTLP IVVHGNGPTKLQLNYLGNYVPNGWTPEGGCGFCNQDRRTLPGGQPPPRVFL
AVFVEQPTPFLPRFLQRLLLLDYPPDRVTFLHNNNEVFHEPHIADSWPQLQDHFSAVKLVGPPEALSPGEARDMA
MDLCRQDPECEFYFSLDADAVLTNLQTLRLILIEENRKVIAPMLSRHGKLWSNFWGALSPDEYYARSEDYVELVQR
KRVGVWNVPIYSQAYVIRGDTLRMELPQRDVFSGSDTDPDMAFCKSFRDKGIFLHLSNQHEFGRLLATSRDYDEH
LHPDLWQIFDNPVDWKEQYIHENYSRALEGE GIVEQPCPDVYWFPLLSEQMCDELVAEMEYQWWSGGRHEDSRL
AGGYENVPTVDIHMKQVGYEDQWLQLLRTYVGPMTESLFPGYHTKARAVMNFVVRYPDEQPSLRPHHDSSTFTL
NVALNHKGLDYE GGCRLRYDCVISSPRKGWALLHPGRLTHYHEGLPTTWGTRYIMVSFVDP

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FIGURE 2371

GCAGTTTATTCCGACAGTTGTGTTGTGCCAATCGTGGAGAAGAAAACCTTCGGTTTCGCTCCCAGGACCCCGGGCAG
CGGCGGGTGCTGGACCGGGCTGCCCGGCAGCGTCGCATCAACCGGCAGCTGGAGGCCCTGGAGAATGACAACTTC
CAGGATGACCCCCACGCGGGACTCCCTCAGCTCGGCAAGAGACTGCCTCAGTTTGATGACGATGCGGACACTGGA
AAGAAAAAGAAGAAAACCCGAGGTGATCATTTTAAACTTCGCTTCCGAAAAAACTTTCAGGCCCTGTTGGAGGAG
CAGAACTTGAGTGTGGCCGAGGGCCCTAACTACCTGACGGCCTGTGCGGGACCCCCATCGCGGCCCCAGCGCCCC
TTCTGTGCTGTCTGTGGCTTCCCATCCCCCTACACCTGTGTCAGCTGCGGTGCCCGGTACTGCACTGTGCGCTGT
CTGGGGACCCACCAGGAGACCAGGTGTCTGAAGTGGACTGTGTGAGCCTGGGCATTCCCAGAGAGGAAGGGCCGC
TGTGCACTGCCCCGCCCTTCAGAAAGACAGAATTTATCACCCAATGCAGGGGGAGCTCTTCCTGGACCAAGGGAG
GAGCCGCTCATTACCCAAACAAAACCTGTGTCTTATCTGCCAGGAAAGACCAGCCTCACTCCTGGGAACTGTCTGG
CAGGTAGGCTGGGCCCCCAGTGCTGTTAGAATAAAAAAGCCTCGTGCCGG

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FIGURE 2372

MVEKKTSVRSQDPGQRRVLDRAARQRRINRQLEALENDNFQDDPHAGLPQLGKRLPQFDDADTGKKKKKTRGDH
FKLRFRKNFQALLEEQNLSVAEGPNYLTACAGPPSRPQRPFCAVCGFPSPYTCVSCGARYCTVRCLGTHQETRCL
KWTIV

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FIGURE 2373

ATATACTTGC GCGCCGACGCCGCCGCTCGCTTGTGAAACTGGAAGGCTGCCATGGCTAGCCCAGCCGCTCCTCG
GTGCGACCACCGAGGCCCAAGAAAGAGCCGACGCTCGTCATCCCCAAGAATGCGGCGGAGGAGCAGAAGCTC
AAGCTGGAGCGGCTCATGAAGAACCCGGACAAAGCAGTTCCAATTCCAGAGAAAATGAGTGAATGGGCACCTCGA
CCTCCCCCAGAAATTTGTCCGAGATGTCATGGGTTCAGTGCTGGGGCCGGCAGTGAGAGTTCCACGTGTACAGA
CATCTGCGCCGAGAGAATATCAGCGACAGGACTACATGGATGCCATGGCTGAGAAGCAAAAATTGGATGCAGAG
TTTCAGAAAAGACTGGAAGAAATAAAATTGCTGCAGAGGAGCAGACCGCAAAGCGCCGGAAGAAGCGCCAGAAG
TTAAAAGAGAAGAAATTACTGGCAAAGAAGATGAAACTTGAAACAGAAAGAAACAAGAAGGACCCGGTCAGCCCAAG
GAGCAGGGGTCCAGCAGCTCTGCGGAGGCATCTGGAACAGAGGAGGAGGAGGAAGTGCCAGTTTCACCATGGGG
CGATGACAAATGTTTGCCACAGCCTCTGCCTGGAACCTGGCTCGTGCTGTGACCAGAAGGGAAAGGCGGCTGTTTG
GCTCTTTCTCCCCGCAAGGACCCGCTGACCCGCTGGATGGAGAGCAAAGGAGACCCCTCCCGAGCCGCTCACAG
TCCTGTATTTGGCAGGTTTGGGAGCCTGAGGGGCCATCTCCCTGACACTCAGAGGCACTGCCTTGACAGACCAT
CCGTGCTCCTGGTAAAGGGGGACAGAGAGCCTCACCTTGCCACATATTTGAACAGTGATGAGTTTGGGGCTGGTT
TCTGGGAAGGGAACGTTTATTTAGTAAAGAGCAGAACACCCCTTGCGTTTTGTTGGGACATGTGGACCGTGAGTCG
CAAACACTCTGGAGAAGGCTGAGATGCCACCATTTCCACGGGGACTGAAGACACATTACGTGGACCTGGTCCCAG
GCTCAGTGAGGAGATGGCCTCAGCTGTGGGGCTGGTCCATGTTGCCCACTCACTCCAGTGGGAAGTGGGGACCAC
GCCATAGAGGGTCTGCTCCCACTGCAGCTCCCGGTGCTCTCGTGTTCTGGGAAGGCCTGGGTGTGTGCACAAGGA
GGCCCGGGCCAGGGACTTCACCAGGGGCTGGGTCAAGGGGCACAGGGTGTGTGGAAGCGCTGTGGGGGAAGAG
CCGGTCACCGGAGAGTGAGCAGGCGGAGACTCCAAGCTGGGCTGAGCCAGAGCAGAAGGCGAGGGATTCCCAGCC
GGACGGGGGTTCTCTACCAACAGCTGTGATTTTCATCCCGAAGTGGAAGGGGCTCTAAACAGAACAGGCTGAGAG
AGGCGGGACTGGGTCAAGTGGGTGGAGCTCCTCCTTGATGACTGCAACTGTGCGGGCTTTCCGCGGGCTCACAG
CAGTTGGGGCCAGCGGGGAGAAGAGAGGCGGAACCTGCTGTGTCTCACGTGGCGCAGCCTCAAACCTGGCATCCAG
GCACTGGGCCCCGTGCAGAGAAGGCACCTGCAGAGAGCAGGGCAGCCCGGCGCAGGGGCATGCGCCTAGAATCCCA
GCTACTCGGAAGGCCAAGGCAGGAGGACCGCTTGAGTCCAGGGATTCAAGGCCAACCTGGGCAATAGAGCGAGAC
CCTGTCTCTTAAAAAACGATGATGATGAACACAGAGGACGGGGCACTGTGCTGGGAGCCAGGGGGCTGGGAGGA
GCCGAGACCAGCCTTTTACCTCGGGGTTTTGAGGCCAACAGGGACGACAGAGACAGTTTCTAGTTAGAGCCTTGG
CTCCATTTTTGGATGATTTAGCCCCGAGTTCCCTGAGTCTATTTTATGCCCTTACGTACTTTGATAGAACTAAGG
AAATAGTGGTTTTGAGTGAAGGGAAGGAAACCCAGAAACATTTTACGTTGCTTTTACTTCTGTAGTGTAGATTG
CCCCGGCCCCCTCTCTGAGCCCTGTAGCATCTGTGATAGCTTCTGTCCCTTCATCGGTTTCATGTACAGGGATTTT
CTTTCCCAGGAAGCGGACACGGAGAGTCAGCCCTAATAAATGAGCACATGCCCTGGCTGTACATTTTGAAACCTG

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FIGURE 2374

MASPAASSVRPPRPKKEPQTLVIPKNAAEEQKLKLERLMKNPDKAVPIPEKMSEWAPRPPPEFVRDVMGSSAGAG
SGEFHVYRHLRRREYQRQDYMDAMAEKQKLDAEFQKRLEKNKIAAEEQTAKRRKKRQKLKEKKLLAKKMKLEQKK
QEGPGQPKEQGSSSSAEASGTEEEEVPSFTMGR

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FIGURE 2375

CGCTCGGCGCCCCGGCCGGGCCACTGGGCCACAGGCCACGCGGCCACGCAGTCCGAGCGGGAGCCGAGCCGGGGCG
GGGCGAGGGCAGCTCCGGAACGTCCCAGGGATGGAAGTGCTTGGATGCGGTGCTGCTGGCTGCGGATGTGCGCAA
GGAGATGGGATGGAGAGCCTGAGTTGGCATTTCGTATAAATGACCTGCCTGGCTCCCAACCATGAGTGCTGAGCTTA
ACGTGCCATATCGACCCCTCTGCTCCTGCCCTGCCCTGAGCCCGGCCATAAGGGCATGGATTACCGGGGACTGGGTCC
GCCGAGCTACCTGGAACGTGGTCACCTCTAACCACCACTCGGTACAGGCCCTGTCTGTGGCGGAAGCTCTACCTGA
GCAGGGCCAAGCTGAAGGCCCTCCAGCAGGACCTCCGCCCTCCTCTCCGGCTTTGCCATGGTGGCCATGGTGGAGG
TGCAGCTGGAGACGCAGTACCAGTACCCGCGGCCGCTGCTGATTGCCTTCAGCGCCTGCACCACGGTGCTGGTGG
CCGTGCACCTGTTCGCCCCTCCTCATCAGCACCTGCATCCTGCCCAATGTGGAGGCCGTGAGCAACATCCACAACC
TGAACCTCCATCAGCGAGTCCCCGCATGAGCGCATGCACCCCTACATCGAGCTGGCCTGGGGCTTCTCCACCGTGC
TTGGCATCCTACTCTTCTCGGCCGAGGTGGTGTGCTGCTGCTGGATCAAGTTCCCTCCCCGTGGATGCCCGGCCGCC
AGCCTGGCCCCCACCTGGCCCTGGGAGTCACACGGGCTGGCAGGCCGCCCTGGTGCTCCACCATCATCATGGTGC
CCGTGGGCCTCATCTTCGTGGTCTTACCATCCACTTCTACCGCTCCCTGGTGCGCCACAAAACGGAGCGCCACA
ACCGCGAGATCGAGGAGCTCCACAAGCTCAAGGTCCAGCTGGACGGGCATGAGCGCAGCCTGCAGGTCTTGTGAG
GGGCCGAGGGCCGGGGCTGGGAGCGGCCCTGTGCCCGGGAGTCCGCAGAGGCGGGGATTTGTGAGATGCAGACAT
TTTGCAAGGCTGCCGGGTAGTTCAAGACCAAAGTTTCTCTTGTCTTAATACCATAAGGACTGGATGACTTCTC
CTGAGATAGAACCGTTTGGTTCAATGAGGGACTGTGTTGCTAAGAGCGTTGGGGGCAAAGCCAGGCTGGTTCCTT
GGCCTCGGGGTTTCTGGGTGCGGGACACGGTGAAGAGGCTCCAGCGGGACCTGCCCATCAGTCTGGGCCAGGA
GGGGCTCCAAGCAGCACCCAGCGGTCCGGGGGAGTCTCAGACCCGGCATGCGTGGCTGGCAGACCTGGGAGAGCC
AGGGCAGGGTTTTCGCTTCAGAGAAGGATTGCCCCAGAGACCCGTGGTGGACTTCATGGGTGCTGAGTGGCCCCGT
GTGACAGTGATGACACGAAGGCTTCGGCGTTTGTGAGTGGGTGCAGGTGCACGCCAGGGCTTGGTGCTTCCCTGCCT
GGCCCTGGAGGGAGCTGGGTGGCCTGGCTTCAGGGGAAGACAGGAGCCAGGACACACGTAGCCACAGCAGGTGTG
GGGGGTGCTGCAGCCCTCGGCAGTGGGGTCAGGCCCTGGGGGATGTTTCCAATGGTGGGCAGCCTGGCCAGGCCG
GAGAAGACATGTTACGGGCATCTATCAGATGCCCCCTTGAGGAGGCTGAGTTATTTGAGGGCTGCTGCAAAGTA
CGCTAGGCTCAAATTCCTTTTCCAGCCAGAGCCCTGGCCACACGGACTCAGAGGGGCCACCGGGGTGGGGAAA
GGACCCCTCCCCCAGCCCCCGCAGCCACTGGCCTCCAGCTCTCGGCCACAGAATGGCCTCTAAGGCTGACTCAGC
CACTCCCTTGGGCTGTGGCAGCAGGAGGCGGGGGCTCTGGCTCAGGCCCCGGAGCCTGTGCAGCTTGCCCATGGC
CCTAGGCAGCGAGGGGACAGCCTGGGGGACTTCTGCCTAGGCAAGGTCAATTGGCCGGGCCTGGCCTGTGGATAG
TGGGGCCAGGGGCCGGCCAGGCCAAATGAGTGCCCTCCTTGTATGACACCAAGTGACTACAAGGGAGGCAAGA
CCCCCTCAGGCCCTCTCAGCCGACACTGGGTCCCACCACACAGTGACTGTGCCGTGCAGTGCAGGTTCTGGCCT
TTTCTTGAAGGCATCTGGTAGACCCGAAGCCACGCTCTCGGGCCGCACATGCACGCCGACAGCACCAGCTGCCCT
GAGCTGCTTGTACAACCAAACACCTTTCCCTCTTCTCCAGCTGTAACCTGGAGAGTCAGCCATGCCTTGTCTTT
TGTTCTCATAAATAGTCACTGGGGCCGGGCGCAGTGACTCACGCCTGTAATCCCAGCACTTTGGGAGGCCTAGGT
GGGCGGATCACTTGAGGTGAGGAGTTCGAGACCAGCCTGGCCAACATGGTGAAACCCTGTCTCTACTAAAAAAT
ACAGAAAATTAGCTGGGCGTGGTGGCGGGCGCCTGTAGCCCCAGCTACTTGGGAGGCTGAGGCGGGAGAATGGCA
ATGGCGTGAACCCGGGAGGCAGAGCTTGACAGTGAGCTGAGATGGCGCCACTGCACTCCAGCCTGGGCGACAGAGC
CAGACTCCATCTC

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FIGURE 2376

CGGCGGTGGCGGACACTTGGGGTCTGGACGCAACGGCGGGGAGCATGAACGCCCCTCCAGCCTTCGAGTCGTT
CTTGCTCTTCGAGGGCGAGAAGATCACCATTAAACAAGGACACCAAGGTACCCAATGCCTGTTTATTCACCATCAA
CAAAGAAGACCACACACTGGGAAACATCATTAAATCACGTGCCTGCTTCCCCTTCGCCTTCTGCCGTGATTGTCA
GTTTCCTGAGGCCTCCCCAGCCACGCTTCCTGTACAGCCTGCAGAACTCTGCCCCAGAGCACATCAGCTATGTGC
CCCAGCTCTCAAACGACACCTTGGCGGGGAGGCTCACCTGTCCACCTTCACGCTGGAGCAGCCTCTAGGCCAGT
TCAGCAGCCACAACATCTCTTGA

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FIGURE 2377

MNAPPAFESFLLFEGEKITINKDTKVPNACLF TINKEDHTLGNI IKS RACFPFAFCRDCQFPEAS PATLPVQPAE
LC PRAHQLCAPALKRHLGGEAHPVHLHAGAASRPVQQPQHL

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FIGURE 2378

CCATTGTGCTCTAAAGGGAAGGTGCTGTGTAATCATTAAAGGAGCGGAGGCTTTTGGAGCTGCTAAAATGCCGGAT
TACCTCGGTGCCGATCAGCGGAAGACCAAAGAGGATGAGAAGGACGACAAGCCCATCCGAGCTCTGGATGAGGGG
GATATTGCCTTGTTGAAAACCTTATGGTCAGAGCACTTACTCTAGGCAGATCAAGCAAGTTGAAGATGACATTGAG
CAACTTCTCAAGAAAATTAATGAGCTCACTGGTATTAAAGAATCTGACACTGGCCTGGCCCCACCAGCACTCTGG
GATTTGGCTGCAGATAAGCAGACACTCCAGAGTGAACAGCCTTTACAGGTTGCCAGGTGTACAAAGATAATCAAT
GCTGATTCGGAGGACCCAAAATACATTATCAACGTAAAGCAGTTTGCCAAGTTTGTGGTGGACCTTAGTGATCAG
GTGGCACCTACTGACATTGAAGAAGGGATGAGAGTGGGCGTGGATAGAAATAAATATCAAATTCACATTCCATTG
CCTCCTAAGATTGACCCAACAGTTACCATGATGCAGGTGGAAGAGAAACCTGATGTCACATACAGTGATGTTGGT
GGCTGTAAGGAACAGATTGAGAACTGCGAGAAGTAGTTGAAACCCCATTAATTTCATCCAGAGAGGTTTGTGAAC
CTTGGCATTGAGCCTCCCAAGGGCGTGCTGCTCTTTGGTCCACCCGGTACAGGCAAGACACTCTGTGCGCGGGCA
GTTGCTAATCGGACTGATGCGTGCTTCATTGAGTTATTGGATCTGAGCTTGACAGAAATACGTCGGTGAGGGG
GCTCGAATGGTTTCGTGAACCTCTTTGAAATGGCCAGAACAAAAAAGCCTGCCTTATCTTCTTTGATGAAATTGAT
GCTATTGGAGGGGCTCGTTTTGATGATGGTGGTGGAGGTGACAATGAAGTGCAGAGAACAAATGTTGGAAGTATC
AATCAGCTTGATGGTTTTGATCCTCGAGGCAATATTAAAGTGCTGATGGCCACTAACAGACCTGATACCTTTGGAT
CCAGCACTGATGAGGCCAGGGAGATTGGATAGAAAAATTGAATTTAGCTTGCCCGATCTAGAGGGTCGGACCCAC
ATATTTAAGATTACGCTCGTTCAATGAGTGTTGAAAGAGATATCAGATTTGAACTGTTAGCACGACTGTGTCCA
AATAGCACTGGTGCTGAGATTAGAAGCGTCTGCACAGAGGCTGGTATGTTTGCCATCAGAGCACGGCGAAAAATT
GCTACCGAGAAGGATTTCTTGGAAGCTGTAAATAAGGTCATTAAGTCTTATGCCAAATTCAGTGCTACTCCTCGT
TACATGACATACAACCTGAACCCCTGAAGGCTTTCAAGTGAAAACCTTTAAATTGGAATCCTAACCTTATATAGACTT
GTTAATAACCAATTCATAAACAAATAAATGGCTTCAACTTTAGAGCACAATGG

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FIGURE 2379

MPDYLGADQRKTKEDKDDKPIRALDEGDIALLKTYGSTYSRQIKQVEDDIQQLLKKINELTGIKESDTGLAPP
ALWDLAADKQTLQSEQPLQVARCTKIINADSEDPKYIINVKQFAKFVVDLSQVAPTDIEEGMRVGVDNRKYQIH
IPLPPKIDPTVTMMQVEEKPDVTYSVGGCKEQIEKLREVVETPLLHPERFVNLGIEPPKGVLLFGPPGTGKTLC
ARAVANRTDACFIRVIGSELVQKYVGEARMVRELFEMARTKKACLIFFDEIDAIGGARFDDGAGGDNEVQRTML
ELINQLDGFDPGRGNIKVLMATNRPDTLDPALMRPGRLDKIEFSLEPDLEGRTHIFKIHARSMSVERDIRFELLAR
LCPNSTGAEIRSVCTEAGMFAIRARRKATEKDFLEAVNKVIKSYAKFSATPRYMTYN

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FIGURE 2380

CTTTCCCTCTGCCAACATGGCGGCCTCAGCAAAAAGAAGAATAAGAAGGGGAAGACTATCTCCCTAACAGACTT
TCTGGCTGAGGATGGGGGTACTGGTGGAGGAAGCACCTATGTTTCCAAACCAGTCAGCTGGGCTGATGAAACGGA
TGACCTGGAAGGAGATGTTTCTACAACCTTGGCACAGTAACGATGACGATGTGTACAGGGCGCCTCCAATTGACCG
TTCCATCCTTCCCCTGCTCCACGGGCTGCTCGGGAACCCAATATCGACCGGAGCCGTCTTCCCAAATCGCCACC
CTACACTGCTTTTCTAGGAAACCTACCCTATGATGTTACAGAAGAGTCAATTAAGGAATTCTTTCGAGGATTAAA
TATCAGTGCAGTGCCTTTACCACGTGAACCCAGCAATCCAGAGAGGCTGAAAGGTTTTGGTTATGCTGAATTTGA
GGACCTGGATTCCCTGCTCAGTGCCCTGAGTCTCAATGAAGAGTCTCTAAGTAACAGGAGAATTCGAGTGGACGT
TGCTGATCAAGCACTGGATAAAGAGTATCGAGATCGTTATGATTACAGACCGGTATCGGGATGGGTATCGGGATGG
CCCACGCCGGGATATGGATCGATATGGTGGCCGGGATCGCTATGATGACCGAGGCAGCAGAGACTATGATAGAGG
CTATGATTCCCGGATAGGCAGTGGCAGAAGAGCATTGTCAGTGGGTATCGCAGGGATGATGACTACAGAGAAGG
CAGGGACTGCTATGAAGACCAATATGACAGACGGGATGATCGGTCTGGAGCTCCAGAGATGATTACTCTCGGGA
TGATTATAGGCGTGATGATAGAGGTCCCCCCCCCCCCAAAGACCCAACTGAATCTAAAGCCTCGGAGTACTCCT
AAGGAAGATGATTCTCTGCTAGTAACTCCCAGTCCACTCGAGCTGCTTCTATCTTTGGAGGGGCAAAGCCTGTT
G

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FIGURE 2381

CCTAACAGACTTTCTGGCTGAGGATGGGGGTACTGGTGGAGGAAGCACCTATGTTTCCAAACCAGTCAGCTGGGC
TGATGAAACGGATGACCTGGAAGGAGATGTTTCTACAACCTGGCACAGTAACGATGACGATGTGTACAGGGCGCC
TCCAATTGACCGTTCCATCCTTCCCACTGCTCCACGGGCTGCTCGGGAGAGACACCCAAGCTGGCAAAGTGAAGA
AACTCAGGAACGGGAACGGTCGAGGACAGGAAGTGAGTCATCAGAGACTGGGACCTCCACCACATCTGGCAGAAA
TGCATGAAGGAGAGAGAGTGAGAAGTCTCTAGAAAATGAAACACTCAATAAGGAGGAAGATTGCCACTCTCCAAC
TTCTAAACCTCCCAAACCTGATCAGCCCCCTAAAGGTAATGCCAGCCCCCTCCACCAAAGGAGAATGCTTGGGTGAA
GCGAAGTTCTAACCTCCTGCTCGATCTCAGAGCTCAGACACAGAGCAGCAATCCCCCTACAAGTGGTGGGGGAAA
AGTAGCTCCAGCTCAACCATCTGAGGAAGGACCAGGAAGGAAAGATGAAAAATAAGTAGATGGGATGAATGTCCC
AAAAGGCCAAACTGGGAACCTTAGCCGTGGTCCAGGAGACTGAGGGAAACAGAGACCCTGGAAGGAGTCAGATAG
GAAAGATGGCAAAGGATCAAGACTCCAGATCTGCACCTGAGCCAAAGAAACCTGAGGAAAAATCCAGCTTCCAA
GTTTCAGTTCTGCAAGCAAGTATGCTGCTCTCTCTGTTGATGGTGAAGATGAAAAATGAGGGAGAAGATTATGCCAA
ATAGACCTCTACATCCTGTGCTTTTCTCCTAGTTTCTCTCCACCCTGGAACATTTCGAGAGCAAAATCAAAACCTCT
ATCCAGACAAGACAAAATAAACTCACCATCTCCTGAAGACCTTTCTTACCTTTTTTTTTTAAAAACAAAAATGAAA
TTATTTTGATGCTGCTGCAGCCTTTAAAGTATTGAAGTAACTGGAGAATTGCCAATACAGCCAGAGAGAAAGGG
ACTACAGCTTTTTAGAGAAGTTGTGGTGCCTTATGTCACCATGCAGTTGCCAGTGTGATTAGTGCCTAGGGGTCT
CCATTTAGCAGAAATGGTAATGACAGTGATATAACGCCTGGAACCTGGTTGGGCAGTAGGGGAGGGAGGTAGAAG
GAAAAGTGTGAGATTTCTACCTTTTAGTTTTTCTTATTGTGGCATATATGAATTCTCAAACATTATCTGAATA
AATTTTCCATTCTTGGAAGGTAGATTTAGCCTCAAGTTGTTTTAGTCTCCAGGAGGCTGCCAGCCCCCTCCTCTT
ATTTAATCTGAGTTTTGGGGGACAGCCTAGAGGGAAATCCTTTTTTTTTTTTTTTTACCCCCAAGGGGGTTAG
TTGGGAGTGAGACTATAGGCCATAAAGAAATGGGACTCATTTGGACCAAAAATAAATGGGAAAAATCGTGGTTTGAAAG
GAAGCTTTTGGGAATTGATGAGTCATTTTGCACCAGGTAATAGGGGAAAAATGTGTGACCTCCAGCAAACACATG
AATGGTTATTTCTGGAGCCGGAAGCACTTGGGGGTGCTGGTAATCCCAATGTTTTCTGTGTCTTAGTTTTACC
CTTCTAAACACTGTCTTTTTGAAAGTTTGAATATATCCACATTCTATTGAAACCTTGAACTAAAAATTTAGA
CTCTTATCGTCATCTTAAGTTCTTCATGCTACTCTTAACCTCCAAAAAGCAGTATCTAAGTCACATACATGATG
TCTTGGGCATTTTCTCTCTCAGCCATGGAGAACTCTGAAAGGAAGAATCGCTGCTTTTCTCAAGCAAATCGGTTT
CTTGATATCTTCTGGTTCTCACTCCTTGCTGCTCCTGATGCTTTGACCCCTTTTATTGATCAGAGTGCTCTAGA
ATAATGGATGGTCTTGGATGGTGGATAAATAGGGACAGGGACAGTTAAATTGGGAGCCTTTCTTACAACCTTGAT
GGGTTTTTTTCCCCCAAGTTTCCTTCTCCACTGAAATGCCACACTAATGTTTGTGGATTTCATGAGGTGGCCAG
ACCAATGTGTTTTGTTTTGTTTTTTTTTTTTTAAGCTTCCCTTGAGAGAATAAACGGAATGGAGAGAACTATTT
AACAAGGTCCGTGTTTCTCTTGCAACACAGTAGCTAAACTTGCTGCTTATATGCATTTTGTAGGGATCAGC
TTGGTAGACAGTATTAGCAGAGAAACACCTTGATCTTGGTTTGCAAACCTTCTGCCATCAGTCCTAGATTAGGC
CCTGTTTCAGCCATGCAGGGGTGTTGGTTTATGCGTGCTGCAGCAGTGGGCATAATGAATATAATTTACCCAGTGG
ACAAAGGTGTGTACCAAGTGAATTTAAATAATTGGTGTGGATTGGCCAGTAGCTAAGAAGTGGGCTTTTAAAGAG
TATTGAAGATTGAAAGGTGTTTTTTTTCTTTTTTAAAAAAGAAAAAAACTATTGATTGTAGATAATGAAAAGC
TAGGGTTTGCCCTCTTCATGTCTACTCTCCTTCCAAATAGTTATATCCAAAACCTGTTTTTCCCTGTCCCCTACCT
TGTCCCCCATTAAAAATAGAAACAGGGATTGATTAATGTCCCGCTCCTGAATACATGTAAAAATTTGTACAAAA
TATCTTCTATGAAAAATGATTTGTAATCTGTAGACTTATTACCTGGGAGATGTCTTGATGTAAAAATCCCATCCTTT
GGGTTGTGGGTTTTTTGTTTTCTCCAAATAAATCTGATCTTTAAAGTTC

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FIGURE 2382

MAASAKKKKKGKTISLTDFLAEDGGTGGGSTYVSKPVSWADETDDLEGDVSTTWHSNDDDDVYRAPPIDRSILPT
APRAAREPNIDRSRLPKSPPYTAFLGNLPYDVTEESIKEFFRGLNISAVRLPREPSNPERLKGFYAEFEDLDSL
LSALSLNEESLGNRRIRVDVADQAQDKDRDDRSFGRDRNRDSDKTDTDWRRARPATDSFDDYPPRRGDDSGDSYD
SRIGSGRRAFSGGYRDDDYGGGDRYEDRYDRDDRSWSSRDDYSRDDYRRDDRGPPQRPKLNKPRSTPKEDD
SSASTSQSTRAASIFGGAKPVDTAAREREVEERLQKEQEKLRQLDEPKLERRPRERHPSWRSEETQERERSRTG
SESSQTGTSTTSSRNARRRESEKSLENETLNKEEDCHSFTSKPPKPDQPLKVMPPPPKENAWVKRSSNPPARSQ
SSDTEQQSPTSGGKVVAPAPQPSSEGFGRKDENVKVDGMNAPKGQTGNSSRGPGDGGNRDHWKESDRKDGKKDQDSR
SAPEPKKPEENPASKFSSASKYAALSVDGEDENEGEDYAE

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FIGURE 2383

GTAGCGGGAGCGGAGAGCGGACCCCGGAGAGCGGACCCAGAGAACCCTGAGCAGCCCCGCCGCTGCCGGCCTAG
TTACCGTCATACCACGGGAGGAGCCGCAGCTGECGCAGCCGGCCCCAGTCTCCATCACCGCAACCAATGAGCAGC
AAGGCCGAGACCCAGCAGCCACCCGCCGCCCGCCCTTCCCCCACC GCCCCCCCTCCCGTCCCCCGGCCGCC
CGCCCTCAGCGCCGCCGACACCAAGCCCGGCAC TACGGGCAGCTGCGCAGGGAGCGGTGGTCCGGGCGGCCCTCAC
ATCGGCGGCGCCTGCCAGCGTGGACAAGAAGGTCATCGCAGTGAAGGTTTGGGAACAGTAAAATGGTTCAATGT
AAGGAACGGATATGGTTTCATCAACAGGAATGACACCAAGGAAGATGTATTTGTACACCAGACTGCCATAAAGAA
TAACCCAGGAAGTACCTTCGCAGTGTAGGAGATGAAGAGACTGTGGAGTTTGATGTTGTTGAAGGAGAAGAGGG
TGCGGAGGCAGCAAATGTTACAGATCCTGGTGGTGTTCGAGTTCAAGGCGGTAAATATGCAGCAGATCGTAACCA
TTATAGACGCTATCCACGTCATAGGGGTCTCCACGCAATTACCAGCAAAATTACCAGAACAGTGAGAGTGGGGA
AAAGACCGAGGGATCGGAGAATGCTCCCGAAGGCCAGGCCCAACAATGCCGGCCCTACCGCAGGCAAAGGTTCCC
ACCTTACTACATGCGGAGACCCTATGGGTGTCGACCACAGTATTCCAGCCCTCCTGTGCAGGGAGAAAGTGATGGA
GGGTGCTGACAACCAGGGTGCAGGAGAACAAGGTAGACCAGTGAGGCAGAATATGTATCGGGGATATAGACCACG
ATTCCGCAGGGGCCCTCCTTGCCAAAGACAGCCTAGAGAGTACGGCAATGAAGAAGATAAAATCAAGGAGATGAG
ACCCAGGGTCAGCAGCCACCTCAACGTCGGTACCGCAGCAACTTCAATTACCAACGCAGATGCCAGAAAACCTT
AAATCACAAGATGGCAAAGAGACAAAATCAGCCAATCCACCAGCTGAGAAATTCGTCTGCTCCCGAGGCTGAGCAG
GGCGGGGCTGAGTAAATGCCGGCTTACCATCTCTACCATCATCCGGTTTAGTCATCCAACAAGAAGAAATATGAA
ATTCCAGCAATGAAGAAATGAACAAAAGATTGGAGCTGAAGACCTTAAGTGCTTGCTTTTTGCCGTTGACCAGAT
AAATAGAACTATCTGCATTATCTATGCAGCATGGGGTTTTTATTATTTTACCTAAATATGTCTCTTTTTGGTAA
TAACAAACGTGTTTTTTTTTAAAAAGCCTTGTTTTTCTCAATACGCCTTTAAAGG

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FIGURE 2384

MRRPYGCRPQYSSPPVQGEVMEGADNQGAGEQGRFVRQNMRYRGYRPRFRRGPPCQRQPREYGNEDKIKEMRPV
SSHLNVGTAATSI TNADAQKTLNHKMAKRQNP I HQLRIRLLPRLSRAGLSKRLTISTII RF SHP TRRNMKFQQ

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FIGURE 2385A

GGGACCTGGAAGCGCCCCAGCCCCGAGCGATCGCAGATTGCGCTTTCAAACAAAAGAGGCGCCCCGGGGGGTGG
GACCGGGACCTCACCCGGTCTCGCAGAGTTGCGGCCGCCCGCCCTTCAGCCCCGGCTCTCCGTATGCGCATGA
GCAGAGGCGCCTCCCTCTGTTCTCCCAAGGCTAAACTTTCTAATTCCTTCTTTGGGCTCGGGGGCTCCCGGAG
CAGGGCGAGAGCTCGCGTTCGCCGAAAGGAAGACGGGAAGAAAGGCGAGGCGGCTCGGCGGGCGTCTTCTCCACT
CCTCTGCCGCGTCCCCGTGGCTGCAGGGAGCCGGCATGGGGCTTCTCCAGTTGCTAGCTTTCAGTTTCTTAGCCC
TGTGCAGAGCCCCGAGTGCAGCGCTCAGGAACCCGAGTTCAGCTACGGCTGCGCAGAAGGCAGCTGCTATCCCGCCA
CGGGCGACCTTCTCATCGGCCGAGCACAGAAAGCTTTCGGTGACCTCGACGTGCGGGCTGCACAAGCCCCGAACCC
TACTGTATCGTCAGCCACTTGCAGGAGGACAAAAATGCTTCATATGCAATTCCCAAGATCCTTATCATGAGACC
CTGAATCCTGACAGCCATCTCATTGAAAATGTGGTCACTACATTTGCTCCAAACCGCCTTAAGATTTGGTGGCAA
TCTGAAAATGGTGTGGAATGTAATATCCAAGTGGATTTGGAAGCAGAAATCCATTTTACTCATCTCATAATG
ACTTTCAAGACATTCCGTCCAGCTGCTATGCTGATAGAACGATCGTCCGACTTTGGGAAAACCTGGGGTGTGTAT
AGATACTTCGCCTATGACTGTGAGGCCTCGTTTCCAGGCATTTCAACTGGCCCCATGAAAAAGTCGATGACATA
ATTTGTGATTCTCGATATTCTGACATTGAACCCCAACTGAAGGAGAGGTGATATTCGTGCTTTAGATCCTGCT
TTCAAATAGAAGATCCTTATAGCCCAAGGATACAGAATTTATTAATAATTACCAACTTGAGAATCAAGTTTGTG
AAACTGCATACTTTGGGAGATAACCTTCTGGATTCAGGATGGAAATCAGAGAAAAGTATTATTATGCAGTTTAT
GATATGGTGGTTCGAGGAAATGCTTCTGCTATGGTCATGCCAGCGAATGTGCCCTGTGGATGGATTCAATGAA
GAAGTGAAGGAATGGTTCACGGACACTGCATGTGCAGGCATAACACCAAGGGCTTAACTGTGAACCTCTGCATG
GATTTCTACCATGATTTACCTTGGAGACCTGCTGAAGGCCGAAACAGCAACGCCTGTAAAAATGTAACCTGCAAT
GAACATTCCATCTCTTGTCACTTTGACATGGCTGTTTACCTGGCCACGGGGAACGTCAGCGGAGGCGTGTGTGAT
GACTGTGACGACAAACCATGGGGCGCAACTGTGAGCAGTGCAAGCCGTTTACTACCAGCACCCAGAGAGGGAC
ATCCGAGATCCTAATTTCTGTGAACGTATGTACGTGTGACCCAGCTGGCTCTCAAAATGAGGGAATTTGTGACAG
CTATACTGATTTTCTACTGGTCTCATTGCTGGCCAGTGTGCGTGTAAATTAATGTGGAAGGAGAACATTGTGA
TGTTTGCAGAAAGAGGCTTCTATGATTTAAGCAGTGAAGATCCATTTGGTTGTAAATCTTGTGCTTGCAATCCTCT
GGGAACAATTCCTGGAGGGAATCCTTGTGATTCCGAGACAGGTCACTGCTACTGCAAGCGTCTGGTGACAGGACA
GCATTGTGACCACTGCCCTGCCAGAGCACTGGGGCTTAAGCAATGATTTGGATGGATGTGACCATGTGACTGTGA
CCTTGGGGGAGCCTTAAACAACAGTTGCTTTGCGGAGTCAGGCCAGTGCTCATGCCGCGCTCACATGATTGGACG
TCAGTGCAACGAAGTGAACCTGGTTACTACTTTGCCACCCTGGATCACTACCTCTATGAAGCGGAGGAAGCCAA
CTTGGGGCTTGGGGTTAGCATAGTGGAGCGGCAATATATCCAGGACCGGATTCCCTCCTGGACTGGAGCCGGCTT
CGTCCGAGTGCTGAGGGGCTTATTTGGAGTTTTCATTGACAACATACCATATTCATGGAGTACGACATCCT
AATTCGCTACGAGCCACAGCTACCCGACCCTGGGAAAAAGCTGTATCACAGTGCAGCGACCTGGAAGGATTCC
AACCAGCAGCCGATGTGGTAATACCATCCCCGATGATGACAACAGGTGGTGTGCTATTATCACCAGGCTCAAGATA
TGTCGTCCTTCTCGGCCGGTGTGCTTTGAGAAGGGAACAACTACACGGTGAGGTTGGAGCTGCCTCAGTACAC
CTCCTCTGATAGCGAGCTGGAGAGCCCTACACGCTGATCGATTCTTGTGTTCTCATGCCATACTGTAAATCACT
GGACATCTTCACCGTGGGAGGTTTCCAGGAGATGGGGTGGTACCAACAGTGCCTGGGAAAACCTTTTCCAGAGATACCG
ATGTCTAGAGAACAGCAGAGAAGCGTTGTGAAAAACCCGATGACAGATGTTTGCAGAAACATCATCTTTAGCATTTT
TGCCCTGTTACACCAGACAGGCTTGGCTTGTGAATGCGACCCCTCAGGGTTTCGTTAAGTTCCGTGTGTGATCCCAA
CGGAGGCCAGTGCCAGTGCCGGCCCCAACGTGGTTGGAAGAACCTGCAACAGATGTGCACCTGGAACCTTTTGGCTT
TGGCCCCAGTGGATGCAAACTTGTGAGTGCCATCTGCAAGGATCTGTCAATGCCTTCTGCAATCCCGTCACTGG
CCAGTGCCACTGTTTCCAGGGAGTGTATGCTCGGCAGTGTGATCGGTGCTTACCTGGGCACTGGGGCTTTCCAAG
TTGCCAGCCCTGCCAGTGCAATGGCCACGCCGATGACTGCGACCCAGTGAAGTGGGAGTGTGTAAGTGGCAGGA
CTACACCATGGGTCTAACTGTGAAAGGTGCTTGGCTGGTTACTATGGCGACCCCATCATTGGGTGAGGAGATCA
CTGCCGCCCTTGGCCCTTGGCCAGATGGTCCCAGAGTGGACGCCAGTTTGGCAGGAGCTGTACCAAGATCCTGT
TACTTTACAGCTTGCCTGTGTTTGTGATCCTGGATACATTGGTTCCAGATGTGACGACTGTGCCTCAGGATACTT
TGGCAATCCATCAGAAGTTGGGGGGTGTGTGACGCTTGGCAGTGTGACAAACATTGACACGACAGACCCAGA
AGCCTGTGACAAGGAGACTGGGAGGTGTCTCAAGTGCCTGTACCACACGGAAGGGGAACACTGTGAGTTCTGCCG
GTTTGGATACTATGGTGATGCCCTCCAGCAGGACTGTGCAAGTGTGTCTGTAATTACCTGGGCACCGTGAAGA
GCACTGTAAACGGCTCTGACTGCCAGTGCAGACAAAGCCACTGGTCAAGTGTGTCTTCTTAATGTGATCGGGCA
GAAGTGTGACCGCTGTGCGCCCAATACCTGGCAGCTGGCCAGTGGCACCTGGCTGTGACCCATGCAACTGCAATGC

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FIGURE 2385B

TGCTCATTCCCTTCGGGCCATCTTGCAATGAGTTCACGGGGCAGTGCCAGTG CATGCCTGGGTTTGGAGGCCGCAC
CTGCAGCGAGTGCCAGGAACCTCTTCTGGGGAGACCCCGACGTGGAGTGCCGAGCCTGTGACTGTGACCCAGGGG
CATTGAGACGCCACAGTGTGACCAGTCCACGGGCCAGTGTGTCTGCGTTGAGGGTGTGAGGGTCCACGCTGTGA
CAAGTGCACGCGAGGGTACTCGGGGTCTTCCCTGACTGCACACCCTGCCACCAGTGCTTTGCTCTCTGGGATGT
GATCATTGCCGAGCTGACCAACAGGACACACAGATTCCCTGGAGAAAGCCAAGGCCTTGAAGATCAGTGGTGTGAT
CGGGCCTTACCCTGAGACTGTGGACTCGGTGGAGAGGAAAGTCAGCGAGATAAAAGACATCCTGGCGCAGAGCCC
CGCAGCAGAGCCACTGAAAAACATTGGGAATCTCTTTGAGGAAGCAGAGAAACTGATTAAAGATGTTACAGAAAT
GATGGCTCAAGTAGAAGTGAAATTATCTGACACAACCTTCCCAAAGCAACAGCACAGCCAAAGAAGTGGATTCTCT
ACAGACAGAAGCCGAAAGCCTAGACAACACTGTGAAAGAACTTGCTGAACAACCTGGAATTTATCAAAAACTCAGA
TATTCGGGGTGCCCTTGATAGCATTACCAAGTATTTCCAGATGTCTCTTGAGGCAGAGGAGAGGGTGAATGCCCTC
CACCACAGAACCCAAACAGCACTGTGGAGCAGTCAGCCCTCATGAGAGACAGAGTAGAAGACGTGATGATGGAGCG
AGAAATCCAGTTCAAGGAAAAACAAGAGGAGCAGGCTCGCCTCCTTGATGAAGTGGCAGGCAAGCTACAAAGCCT
AGACCTTTCAGCCGCTGCCGAAATGACCTGTGGAACACCCCCAGGGGCCCTCCTGTTCCGAGACTGAATGTGGCGG
GCCAAACTGCAGAACTGACGAAGGAGAGAGGAAGTGTGGGGGGCCTGGCTGTGGTGGTCTGGTTACTGTTGCACA
CAACGCCCTGGCAGAAAGCCATGGACTTGACCAAGATGTCTCTGAGTGCCCTGGCTGAAGTGGAAACAGCTCTCCAA
GATGGTCTCTGAAGCAAACTGAGGGCAGATGAGGCCAAAACAAAGTGCTGAAGACATTCTGTTGAAGACAAATGC
TACCAAAGAAAAATGGACAAGAGCAATGAGGAGCTGAGAAATCTAATCAAGCAAATCAGAACTTTTTTGACCCA
GGATAGTGCTGATTTGGACAGCATTGAAGCAGTTGCTAATGAAGTATTGAAAATGGAGATGCCTAGCACCCACA
GCAGTTACAGAACTTGACAGAAGATATACGTGAACGAGTTGAAAGCCTTTCTCAAGTAGAGGTTATTCTTCAGCA
TAGTGCTGCTGACATTGCCAGAGCTGAGATGTTGTTAGAAGAAGCTAAAAGAGCAAGCAAAAGTGCAACAGATGT
TAAAGTCACTGCAGATATGGTAAAGGAAGCTCTGGAAGAAGCAGAAAAGGCCAGGTGCGCAGCAGAGAAGGCAAT
TAAACAAGCAGATGAAGACATTCAAGGAACCCAGAACCTGTAACTTCGATTGAGTCTGAAACAGCAGCTTCTGA
GGAAACCTTGTTCACGCGTCCCAGCGCATCAGCGAGTTAGAGAGGAATGTGGAAGAACTTAAGCGGAAAGCTGC
CCAAAACCTCCGGGGAGGCAGAAATATATGAAAAAGTAGTATATACTGTGAAGCAAAGTGCAAGATGTTAAGAA
GACTTTAGATGGTGAACCTTGATGAAAAGTATAAAAAAGTAGAAAAATTAATTGCCAAAAAACTGAAGAGTCAGC
TGATGCCAGAAGGAAAGCCGAAATGCTACAAAATGAAGCAAAAACCTCTTTTAGCTCAAGCAAATAGCAAGCTGCA
ACTGCTCAAAGATTTAGAAAGAAAAATGAAGACAATCAAAGATACTTAGAAGATAAAGCTCAAGAATTAGCAAG
ACTGGAAGGAGAAAGTCCGTTCACTCCTAAAGGATATAAGCCAGAAAGTTGCTGTGTATAGCACATGCTTGTAACA
GAGGAGAATAAAAAATGGCTGAGGTGAACAAGGTAAAACAACTACATTTTAAAACTGACTTAATGCTCTTCAA
ATAAAACATCACCTATTTAATGTTTTAATCACATTTTGATGGAGTTAAATAAAG

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FIGURE 2386

CTCTTTTTCCGGCTGGAACCATGGTGGGTGTAGAAGAGAAGAAGAAGGTTCTGCTGTGCCAGAAACCCTTAAGA
AAAAGCGAAGGAATTTCTCAGAGCTGAAGATGAAGCGCCTGAGAAAGAAGTTTGCCCAAAAGATGCTTCGAAAGG
CAAGGAGGAAGCTTATCTATGAAAAAGCAAAGCACTATCACAGGGAATATAGGCAGATGTACAGAACTGAAATTC
GAATGGCGAGGATGGCAAGAAAAGCTGGCAACTACTTTGTACCTGCAGAACCCAAACTGGCATTGTGCATCAGAA
TCAGAGGTATCAGTGGCGTGAGCCCAAAGGTCCGAAAGGTGTTGCAGCTTCTTCGCCTTCGTCAAATCTACAATG
GAACCTTTGTGAAGCTCAACAAGGCTTCGACTAACATGCTGAGGATTGTAGAGCCATATATTGCATGGGGGTACC
CCAATCTGAAGTCAGTAAATGAACTAATCTACAAGAGTGGTTATGGCAAAATCAATAAGAAGCGAATTGCTTTGA
CAGATAACGCTTTGATTGCTCGATCTCTTGGTAAATATGGCATCATCTGCATGGAGGATCTGATTCATGAGATCT
ATACTGTTGGAAAACGCTTCAAAGAGGCAAATAACTTCCTGTGGCCCTTCAAATTGTCTTCTCCACGAGGTGGAA
TGAAGAAAAAGACCACCCATTTTGTAGAAGGTGGAGATGCTGGCAACAGGGAGGACCAGATCAACAGGCTTATTA
GAAGAATGAACTAAGGTGTCTACCATGACTATTTCTCTAAGCTGGTTGGTTAATAAACAGTACCTGCTCTCAAAAT
TGG

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FIGURE 2387

CTTCCTAGAAGGTAATGTACGAACTCGTCTCCAAAGGATACTTAGGTTGCACCAGTGTATTTGTAAACAGGAGC ,
AAATTTGGACCTTGCCGGGCCAAAGTCGTGTACGTGGAACCTCTTAATCTCAGCATCCGGAGCTCCAGGAAGGG
AAAATTTCAAGTCAGATAGAATTCTATATATACCATTTCTAGGAACCTTCAGCCCTCAAGATTCCAACATCATGA
CCTCAGTTTCAACACAGTTGTCCTTAGTCCTCATGTCACTGCTTTTGGTGCTGCCTGTTGTGGAAGCAGTAGAAG
CCGGTGATGCAATCGCCCTTTTGGTTAGGTGTGGTTCTCAGCATTACAGGCATTTGTGCCTGCTTGGGGGTATATG
CACGAAAAAGAAATGGACAGATGTGACTTTGAAAGGCCTACTGAGTCAAACCTCACCCCTGAAAACCTTTGCGCTT
TAGAGGCTAAACCTGAGATTTGGTGTGTGAAAGGTTCCAAGAATCAGTAAATAAGGGAGTTTCACATTTTTCATT
GTTTCCATGAAATGGCAACAAACATACATTTATAAATTGAAAAAAAAATGTTTTCTTTACAACAAATAATGCACA
GAAAAATGCAGCCTATAATTTGCTAGTTAGGTAGTCAAAGAAGTAAGATGGCTGAAATTTACATAAGTAAATTTT
CATAATCTTAGAATTCTCTCAAAGCATGTGAAATAGGAAGAAGGAAGTTCTTGCCCAGAATCTTAGGAAATCACC
ACTGTTTCGGTTATAATCACTGCCTCCTGAATCGTTGAGGAGTCTTTTAAATTAGATTTTGTGTTGTGCTCCC
AAGTTAATATTATATTTAGATATCAGAGAGTCAGGCAAAAAGGAAAACCTTTATCTCTAGGGAAAAACATTTAG
AAAAATGTATTTCAGTGTATCTAATACTGAAATGCGGAAAAAAATTTAATGTTAAAAAAAACATATAGACATTGAC
ATGGAAGAGATTTAATGTTTTGAAAAAAACCTTTATATTAAGTAACTGAGTAACATCCTCCTGATGAGAAGTACTAT
ATTAAATATAAACCCATTATGTTAT

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FIGURE 2388

MYELVSKGYLGCTSVFVKQEIQWTLPQSRVTWNLLISASGAPGRENFKSDRILYIPFLGTFSPQDSNIMTSVST
QLSLVLSLLLVPVVEAVEAGDAIALLGVVLSITGICACLG VYARKRNGQM

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FIGURE 2389

GAGTGGCTGTTGAGCGGCGCCGCGGGAGTTCCGCAGGTTTCCCGTGTTTCGCAGCGGAGCCGGAGGCCAGCTGAAC
CCGGCCGTGGGATCCCGGATAGGAGGAGGAGGGGACCCATAGGACGCGTTAACATGGACCTGGAAAACAAAGTGA
AGAAGATGGGCTTAGGTCACGAGCAAGGATTTGGAGCCCCCTGTTTAAAATGCAAAGAAAAATGTGAAGGATTTCG
AACTGCACCTTCTGGAGAAAAATATGTCGTAAGTGAAGTGTGGCCAAGAAGAGCATGATGTCCTCTTGAGCAATG
AAGAGGATCGAAAAGTGGGAAAACTTTTGAAGACACCAAGTATACCACTCTGATTGCAAACTAAAGTCAGATG
GAATTCCTCATGTATAAACGCAATGTTATGATATTGACGAATCCAGTTGCTGCCAAGAAGAATGTCTCCATCAATA
CAGTTACCTATGAGTGGGCTCCTCCTGTCCAGAATCAAGCATTGGCCAGGCAGTACATGCAGATGCTACCCAAGG
AAAAGCAGCCAGTAGCAGGCTCAGAGGGGGCACAGTACCGGAAGAAGCAGCTGGCAAAGCAGCTCCCTGCACATG
ACCAAGGACCCCTTCAAAGTGCCATGAGTTGTCTCCAGAGAGGTGAAGGAGATGGAGCAGTTTGTGAAGAAATATA
AGAGCGAAGCTCTGGGAGTAGGAGATGTCAAACCTCCCTGTGAGATGGATGCCCAAGGCCCCAAACAAATGAACA
TTCCTGGAGGGGATAGAAGCACCCAGCAGCAGTGGGGGCCATGGAGGACAAATCTGCTGAGCACAAAAGAACTC
AATATTCTGCTATTGCTGCAAACTGAGTATGAAAGAAGGTGACCCAGCCATCTATGCCGAAAGGGCTGGCTATG
ATAAACTGTGGCACCCAGCTTGTTTTGTCTGCAGCACCTGCCATGAACTCCTGGTTGACATGATTTATTTTTGGA
AGAATGAGAAGCTATACTGTGGCAGACATTACTGTGACAGCGAGAAACCCCGATGTGCTGGCTGTGACGAGCTGA
TATTCAGCAATGAGTATACCCAGGCAGAAAACAGAAATTGGCACCTGAAACACTTCTGCTGCTTTGACTGTGATA
GCATTCTAGCTGGGGAGATATACGTGATGGTCAATGACAAGCCCGTGTGCAAGCCCTGCTATGTGAAGAATCACG
CTGTGGTGTGTCAAGGATGCCACAATGCCATCGACCCAGAAGTGCAGCGGGTGACCTATAACAATTCAGCTGGC
ATGCATCCACAGAGTGCTTTCTGTGCTCTTGCTGCAGCAAATGCCTCATTGGGCAGAAGTTCATGCCAGTAGAAG
GGATGGTTTTCTGTTCAAGTGAATGTAAGAAGAGGATGTCTTAGGAGGAGGGCACCCAGAAGTATCGAGCCATAG
CTATCCAAAGTGGTCTGCAATTTCTACTGTAAAATGCAATTTGAAAAAATAAAACGCAAAAAAAGAACTGTAAA
GGAAACCAAGAGATTTTGTTTAATTTTTTTGGCCATTTTTTCTTCATCAATTTTTTTTCGGTCTCAACTTTTAAA
CTTGGTTTAAGCATTTGATTTGTAAAACAGTAAATAATTGTATCTTTCCATAGCTTTTCAAATGTGAAATCATT
TTGGAAGCTTGGATCTCATTAAACTTCATGTCTCTATTCCATTTGTGCCACACACTTAAAAGTTAGTGTACTGAA
TGGAAAGATGAGCATTCTAGTTCTACACTTCTTTTTTCCCCCTCATGTGTAAAATGAAAAGAAAATAAATTTG
CCCTAATACCAAGGCGCTACGTTTATTGCCTCGTCTTATTCACTGACCTTTGTAATGATACACAGTGAATTCCTT
TTGACAAAGAGAAATGCAGTGTAGTATGCAGAGCTGCTGTTTTAATGCCTATGCATTTACTCTTTCCTGATTTAG
GCAGAGGTGGCATTCTTTATTGCAATTTCTCTATTTTTTAAATGTACCCTACCTTCAGTATTCTCTTTGTAAGT
TGGTGACTTGCACTGTGGCCTTGAATATTTTATTATCACATGTGGCATAACAGTATCCACACTTTTTAGTTCTT
TATTTTTTTTTTTTTATTTTGAAGCAATTCCTGCCTCAGCCTCCCAAATAGCTGGGATTACAGGTGCATGCCAC
CACACCCAGCTAATTTTTGTATTTTAGTAGAGACAGGTTTTACCATGTTAGCCAGGCTGGTCTCAAACCTCTG
ACCTCAGATGATCCGCTGCCTTGGCCTCCCAAAGTGCTGGGATTACAGGTGTGGGAGCCACCATGCCTGACCCA
CACACTTTTTACTTGTATAGATGATTTTGGCTTGGACATAAAAGCCAAGCCACCATTTGCTTTTAAATCCAAAG
AACATGTATAGTTTTTGTACCCAGAGACTATGATTTATATTGATTGCACCTGCCTGCCATGATTTAGATAAGATT
TTTTTGCATGGTTTTTATCTTTCCTAATGGATCCTGTTTTATAATACTTCCAAGCCTGTCCATGGATATATCA
AATGTCTTCACTTGTATATTTTCATGGCTAGGTATTTCTAATGTTTATTCTTCCCTGTGTACTTCTACACATAGC
TATGCACATGAAAATTAAATGGAATGAATGATATATTACTCAAATAAAGTTTCTTTCACTTT

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FIGURE 2390

MDLENKVKKMGLGHEQGFGAPCLKCKEKCEGFELHFWRKICRNCKCGQEEHDVLLSNEEDRKVGKLFEDTKYTTL
IAKLKSDGIPMYKRNVMLTNPVAAKKNVSINTVTYEWAPPVQNQALARQYMQMLPKEKQPVAGSEGAQYRKKQL
AKQLPAHDQDPSKCHELSPREVKEMEQFVKKYKSEALGVGDVKLPCEMDAQGPKQMNIPGGDRSTPAAVGAMEDK
SAEHKRTQYSCYCKLSMKEGDPAIYAERAGYDKLWHPACFVCSTCHELLVDMYFWKNEKLYCGRHYCDSEKPR
CAGCDELIFSNEYTQAENQNWHLKHFFCCFDCDSILAGEIYVMVNDKPVCKPCYVKNHAVVCQGCHNAIDPEVQRV
TYNNFSWHASTECFLSCCCSKCLIGQKFMPEGMVFCVSVECKKMS

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FIGURE 2391

GGGAGAAACGTTCTCACTCGCTCTCTGCTCGCTGCGGGCGCTCCCCGCCCTCTGCTGCCAGAACCTTGGGGATGT
GCCTAGACCCGGCGCAGCACACGTCCGGGCCAACCGCGAGCAGAACAAACCTTTGGCGGGCGGCCAGGAGGCTCC
CTCCCAGCCACCGCCCCCTCCAGCGCCTTTTTTTCCCCCATACAATACAAGATCTTCCTTCCTCAGTTCCCTT
AAAGCACAGCCAGGGAAACCTCCTCACAGTTTTTCATCCAGCCACGGGCCAGCATGTCTGGGGGCAAATACGTAG
ACTCGAGGGACATCTCTACACCGTTCCCATCCGGGAACAGGGCAACATCTACAAGCCCAACAACAAGGCCATGG
CAGACGAGCTGAGCGAGAAGCAAGTGACGACGCGCACACCAAGGAGATCGACCTGGTCAACCGCGACCCCTAAC
ACCTCAACGATGACGTGGTCAAGATTGACTTTGAAGATGTGATTGCAGAACCAGAAGGGACACACAGTTTTGAAG
GCATTTGGAAGGCCAGCTTCACCACCTTCACTGTGACGAAATACTGGTTTTACCGCTTGCTGTCTGCCCTCTTTG
GCATCCCGATGGCACTCATCTGGGGCATTACTTCGCCATTCTCTCTTTCTGCACATCTGGGCAGTTGTACCAT
GCATTAAGAGCTTCTTGATTGAGATTCACTGCATCAGCCGTGTCTATTCCATCTACGTCCACACCGCTCTGTGACC
CACTCTTTGAAGCTGTTGGGAAAATATTAGCAATGTCCGCATCAACTTGCAGAAAGAAATATTAATGACATTTT
AAGGATAGAAGTATACCTGATTTTTTTTCTTTTAAATTTTCTGGTGCCAATTTCAAGTTCCAAGTTGCTAATAC
AGCAACAATTTATGAATTGAATTATCTTGGTTGAAAATAAAAAGATCACTTTCTCAGTTTTTCATAAGTATTATGT
CTCTTCTGAGCTATTTTCATCTATTTTTTGGCAGTCTGAATTTTTTAAACCCATTTAAATTTTTTCTTACCTTTT
TATTTGCATGTGGATCAACCATCGCTTTATTGGCTGAGATATGAACATATTGTTGAAAGGTAATTTGAGAGAAAT
ATGAAGAACTGAGGAGGAAAAAAAAAAAAAAAAAGAAAAGAACCAACAACCTCAACTGCCTACTCCAAAATGTTGGTC
ATTTTATGTTAAGGGAAGAATTCCAGGGTATGGCCATGGAGTGTAAGTATGTGGGCAGATTTTCAGCAAACCTC
TTTTCCCACTGTTAAGGAGTTAGTGGATTACTGCCATTCACTTCATAATCCAGTAGGATCCAGTGATCCTTACA
AGTTAGAAAACATAATCTTCTGCCTTCTCATGATCCAACATAATGCCTTACTCTTCTTGAAATTTTAAACCTATGAT
ATTTTCTGTGCCTGAATATTTGTTATGTAGATAACAAGACCTCAGTGCCTTCTGTGTTTTTACATTTTCTTTTCT
AAATAGGGTCTAACTCAGCAACTCGCTTTAGGTCAGCAGCCTCCCTGAAGACCAAAATTAGAATATCCATGACCT
AGTTTTCCATGCGTGTCTTGACTCTGAGCTACAGAGTCTGGTGAAGCTCACTTCTGGGCTTCATCTGGCAACAT
CTTTATCCGTAGTGGGTATGGTTGACACTAGCCCAATGAAATGAATTAAAGTGGACCAATAGGGCTGAGCTCTCT
GTGGGCTGGCAGTCTTGGAAGCCAGCTTTCCCTGCCTCTCATCAACTGAATGAGGTGAGCATGTCTATTAGCTT
CGTTTATTTTCAAGAATAATCACGCTTTCTGAATCCAACTAATCCATCACCGGGGTGGTTTAGTGGCTCAACA
TTGTGTTCCCATTTTCAAGCTGATCAGTGGGCCCTCCAAGGAGGGGCTGTAAAATGGAGGCCATTGTGTGAGCCTATC
AGAGTTGCTGCAAACCTGACCCCTGCTCAGTAAAGCACTTGCAACCGTCTGTTATGCTGTGACACATGGCCCTC
CCCCTGCCAGGAGCTTTGGACCTAATCCAAGCATCCCTTTGCCAGAAAGAAGATGGGGGAGGAGGCAGTAATAA
AAAGATTGAAGTATTTTGTGGAATAAGTTCAAATCTTCTGAACTCAAAGTGAAGATTTTCACTGTAAACCTG
AGTCGTACAGAAAGCTGCCTGGTATATCCAAAAGCTTTTTATTCTCTGCTCATATTGTGATTCTGCCTTTGGG
GACTTTTCTTAAACCTTCAGTTATGATTTTTTTTTTTCATACACTTATTGGAACCTCTGCTTGATTTTTGCCTCTTCC
AGTCTTCTGACACTTTAATTACCAACCTGTTACCTACTTTTGACTTTTTCATTTTAAACAGACACTGGCATGGA
TATAGTTTTACTTTTAACTGTGTACATAACTGAAAATGTGCTATACTGCATACTTTTTTAAATGTAAAGATATTT
TTATCTTTATATGAAGAAAATCACTTAGGAAATGGCTTTGTGATTCAATCTGTAAACTGTGTATTCCAAGACATG
TCTGTTCTACATAGATGCTTAGTCCCTCATGCAATCAATTACTGGTCCAAAAGATTGCTGAAATTTTATATGCT
TACTGATATATTTTACAATTTTTTATCATGCATGTCTGTAAAGGTTACAAGCCTGCACAATAAAAATGTTTAAAC
GGTT

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FIGURE 2392

MSGGKYVDSEGHLYTVPIREQGNIYKPNNKAMADELSEKQVYDAHTKEIDLVRDPKHLNDDVVKIDFEDVIAEP
EGTHSFDGIWKASFTTFTVTKYWFYRLLSALFGIPMALIWGIYFAILSFLHIWAVVPCIKSFLIEIQCISRVYSI
YVHTVCDPLFEAVGKIFSNVRINLQKEI

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FIGURE 2393

TTTGTGCGCCAGAAGGAAGATGGCGGATCTGGAGGAGCAGTTGTCTGATGAAGAGAAGGTGCGTATAGCAGCAAAA
TTCATCATTTCATGCCCCCTCCTGGAGAATTTAATGAGGTTTTCAATGATGTTTCGGTTACTGCTTAATAATGACAAT
CTTCTCAGGGAAGGAGCAGCCCATGCATTTGCACAGTATAACTTGGACCAGTTTACTCCAGTAAAAATTGAAGGT
TATGAAGATCAGGTATTGATAACAGAACATGGCGACTTGGGAAATGGAAAGTTTTTGGATCCAAAGAACAGAATC
TGTTTTAAATTTGATCACTTAAGGAAGGAGGCAACTGATCCAAGACCCCTGTGAAGTAGAAAATGCAGTTGAATCA
TGGAGAACTTCAGTAGAACTGCTCTGAGAGCTTACGTAAAAGAACATTACCCGAATGGAGTCTGCACTGTGTAT
GGCAAAAAAATAGATGGACAGCAAACCATTATTGCATGCATAGAAAGCCATCAGTTCCAAGCAAAAAATTTTTGG
AATGGTCGTTGGAGGTCAGAATGGAAGTTTACAATCACTCCTTCAACCACTCAAGTGGTTGGCATCTTGAAAATT
CAGGTTCAATTATTATGAAGATGGTAATGTTTCAGCTAGTGAGTCATAAAGATATACAAGATTCCCTAACAGTGTCT
AATGAAGTGCAAACAGCAAAAGATTTATAAAGATTGTAGAAGCTGCAGAAAATGAATACCAGACTGCCATCAGT
GAGAATTATCAGACAATGTCGGACACTACTTTCAAAGCCTTACGTCGACAGTTGCCAGTTACACGCACTAAGATT
GATTGGAACAAGATCCTTAGCTACAAGATTGGCAAGAGATGCAGAATGCATAAGATGAACATTGCATGACCGGA
TCATTTTAGTGTCCTTGC

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FIGURE 2394

MADLEEQLSDEEKVRIA AKFI IHAPPGEFNEVFNDVRL LLNNDNLLREGAAHAF AQYNLDQFTPVKIEGYEDQVL
ITEHGD LGNGKFLDPKNRICFKFDHLRKEATDPRPCEVENAVESWRTSVETALRAYVKEHYPNGVCTVYGKKIDG
QQTIIACIESHQFQAKNFWNGRWRSEWKFTITPSTTQVVGILKI QVHYEDGNVQLVSHKDIQDSLTVSNEVQTA
KEFIKIVEAAENEYQTAISENYQTMSDTTFKALRRQLPVTRTKIDWNKILSYKIGKEMQNA

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FIGURE 2395

CTCTCCGGTCCGTGCCTCCAAGATGACAAAGAAAAGAAGGAACAATGGTCGTGCCAAAAAGGGCCGCGGCCACGT
GCAACCTGTTTCGCTGTACTAACTGTGCCCGATGCGTGCCCAAGGACAAGGCCATTAAGAAAATTCGTCATTTCGAAA
CATAGTGGAGGCCGTAGCAGTCAGGGACATTTCTGAAGCAAGCGTCTTCGATGCCTATGTGCTTCCCAAGCTGTA
TGTGAAGCTACATTACTGTGTGAGTTGTGCAATTCACAGCAAAGTAGTCAGGAATCGATCTCGTGAAGCCCGCAA
GGACCGAACACCCCCACCCAGATTTAGACCTGCGGGTGCTGCCCCACGTCCCCCACC AAAAGCCCATGTAAGGAGC
TGAGTTCTTAAAGACTGAAGACAGGTTATTCTCTGGAGAAAAATAAAATGGAAATTGTA

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FIGURE 2396

TGGAGCTAAGCTGTTTCCAGGGTGACAGAGTGGCGACCTCGGTGGTCGATTGAGCAGGTCTGAGAATTGTTCCCA
AAGGGTTGTGCGTCACCGAGTCGTTGGCGCTGTCAATGGCGGGTGTGCTGAAGAAGACCACTGGCCTTGTGGGATT
GGCTGTGTGCAATACTCCTCACGAGAGGCTAAGAATATTGTACACAAAGATTCTTGATGTTCTTGAGGAAATCCC
TAAAAATGCAGCATATAGAAAGTATACAGAACAGATTACAAATGAGAAGCTGGCTATGGTTAAAGCGGAACCAGA
TGTTAAAAAATTAGAAGACCAACTTCAAGGCGGTCAATTAGAAGAGGTGATTCTTCAGGCTGAACATGAACTAAA
TCTGGCAAGAAAAATGAGGGAATGGAACTATGGGAGCCATTAGTGGAAGAGCCTCCTGCCGATCAGTGGAATG
GCCAATATTAAATTATTAAGTGACTTTGGTGTGTTTCATGGGAACTGATGTAATTAAATATTCTGTTATATTAAGAG
CGTGTTCCTTATTACTGACATTTTGTAAATCAAGAAAAGTGATATAGAAAATATGTAGGAGACTGTTAAAATTGGTG
ATTATGGTAATATGGTCATGTGAATCAATTTTTGATTTATAAAGTACTCACACAAGTTGTTTCAAAGATGATATT
TCTGTGAACAGAGAGGCCATGGGAAGATTTGAAAATTATTAAAGAAAAATTCCTACAGATTTTCAATGCAGAGAC
CATAATCAAAAAGTAAACTTTCTTTAGTAGTATGTTCAATACATCATTTAATTTTTTAAGTTATCCTGAAGAAGG
AAAGGTCCTTAATTATTATAGTCTAAACAAATTTATAGATTACTGTTTGAAGTAAATAATACGAGTGAATATTTT
CAAATGTGATAAAAATAGCACAAAGTGGCTGGTGATAAAATTTGAAATTATGGTTAACCTCAGCTGTGATCCTTATGT
ATGTAAAGTGAAATTTAAATAGATAATTATAGGTTGATTACAAAATCCATAGTGTCAATTTATTTTAGTCATTAT
TGAATTATACCATTTACTCTGTTTTCTTATAGTCTTAATTTTATTATATTTGTTGTTACTGTATTATATTTGAA
AACCTTCAAATTAGAATACATTGTACAGTTAAAGAAATTGACTTGGTACTTAAAAGAAAGATTTCCCATTCGATA
CAGGTTATTGGAGAAATTTTCTTTTGTGCAATTTGTGGAAGTTAGTTTTCTGGCCCGTGGCCTTTAATTTTCTT
AATCAACCTAATTACATCAGGATAGAGGTAGAGTTTCTGTAAAAGAAGAGACATTAAGAGTTCCTGAAATTTATA
TCTGGCATACCGATAGGCTTATATTCAAAACATCTTAGTCATACGACCATAAATTTAAAGTGGAGTCACTAAATA
GTTTGCAGTACGTTTCTAATATAAGTGTAGGTGGGTATCAAAACAAGACAAATGCTGTTCAGGGAAAGAAGTTGG
CAAGCTTAAGGTTAAACAAAAATAAAATTACATGTGTTTTCGCCTTCCTA

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FIGURE 2397

MAGVLKKTGTLVGLAVCNTPHERLRILYTKILDVLEEIPKNAAYRKYTEQITNEKLAMVKAEPDVKKLEDQLQGG
QLEEVILQAEHELNLARKMREWKLWEPLVEEPPADQWKWPI

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FIGURE 2398

CCGCGTCGGTGCCCGCGCCCCCTCCCCGGGCCCCGCCATGGGCCTCACCGTGTCCGCGCTCTTTTCGCGGATCTTC
GGGAAGAAGCAGATGCGGATTCTCATGGTTGGCTTGGATGCGGCTGGCAAGACCACAATCCTGTACAACTGAAG
TTGGGGGAGATTGTCACCACCATCCCAACCATAGGCTTCAATGTAGAAACAGTGGAATATAAGAACATCTGTTTC
ACAGTCTGGGACGTGGGAGGCCAGGACAAGATTTCGGCCTCTGTGGCGGCACTACTTCCAGAACACTCAGGGCCTC
ATCTTTGTGGTGGACAGTAATGACCGGGAGCGGGTCCAAGAATCTGCTGATGAACTCCAGAAGATGCTGCAGGAG
GACGAGCTGCGGGATGCAGTGCTGCTGGTATTTGCCAACAAGCAGGACATGCCCCACGCCATGCCCGTGAGCGAG
CTGACTGACAAGCTGGGGCTACAGCACTTACGCAGCCGCACGTGGTATGTCCAGGCCACCTGTGCCACCCAAGGC
ACAGGTCTGTACGATGGTCTGGACTGGCTGTCCCACGAGCTGTCAAAGCGCTTAACCAGCCAGGGGCAGGCCCTG
ATGCCCGGAAGCTCCTGCGTGCAATCCCCGGGATGACCAGACTCCCGGACTCCTCAGGCAGTGCCCTTTCTCCCA
CTTTTCCTCCCCCATAGCCACAGGCCTCTGCTCCTGCTCCTGCCTGCAIGTTCTCTCTGTTGTTGGAGCCTGGAG
CCTTGCTCTCTGGGCACAGAGGGGTCCACTCTCCTGCCTGCTGGGACCTATGGAAGGGGCTTCCTGGCCAAGGCC
CCCTCTTCCAGAGGAGGAGCAGGGATCTGGGTTTTCTTTTTTTTTCTGTTTTGGGTGTACTCTAGGGGCCAGGT
TGGGAGGGGGAAGGTGAGGGCTTCGGGTGGTGCTATAATGTGGCACTGGATCTTGAGTAATAAATTGCTGTGGT
TTG

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FIGURE 2399

MGLTVSALFSRIFGKKQMRILMVGLDAAGKTTILYKLKLGEIVTTIPTIGFNVETVEYKNICFTVWDVGGQDKIR
PLWRHYFQNTQGLIFVVDSDNDRERVQESADELQKMLQEDELRDVLLVFANKQDMPNAMPVSELTDKLGLQHLRS
RTWYVQATCATQGTGLYDGLDWLSHELKR

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FIGURE 2400

GCGAGTAGAACGTGTGGCGGGCGGCGGAGATCGCGTCTCTTTTCGCTCCGTGTCCCGCTGCTGCTCCTGTGAGCGCC
CGGCGAGTCCGTCCCGTCCACCGTCCGCAGCTGGTAGCCAGCCTGCCCCCTCGCCTCGACTCCCTTTACCAACAC
CGACACCCACATTGACACCTCCAGTCCGGCCAGCCGCTCCACTCGTTGCCTTTGCATCTCCACACATGGCGTCCT
CCGCGCAGAGCGGGCGCTCCTCCGGGGGACCCGCGGTCCCCACCGTGCAGCGGGGCATCATCAAGATGGTCCTCT
CAGGGTGCGCCATCATTGTCCGAGGTGAGCCTCGTGGTGGGCCTCCTCCTGAGCGGCAGATCAACCTCAGCAACA
TTCGTGCTGGAAATCTTGCTCGCCGGGCAGCCGCCACACAACCTGATGCAAAGGATACCCCTGATGAGCCCTGGG
CATTTCCAGCTCGAGAGTTCTTTCGAAAGAAGCTGATTGGGAAGGAAGTCTGTTTCACGATAGAAAAACAAGACTC
CCCAGGGGCGAGAGTATGGCATGATCTACCTTGGAAAAGATACCAATGGGGAAAAATTGCAGAATCACTGGTTG
CAGAGGGCTTAGCCACCCGGAGAGAAGGCATGAGAGCTAATAATCCTGAGCAGAACCGGCTTTCAGAATGTGAAG
AACAAGCAAAGGCAGCCAAGAAAGGGATGTGGAGTGAGGGGAACGGTTCACATACTATCCGGGATCTCAAGTATA
CCATTGAAAACCCAAGGCACTTTGTGGACTCACACCACCAGAAGCCTGTTAATGCTATCATCGAGCATGTGCGGG
ACGGCAGTGTGGTCAGGGCCCTGCTCCTCCAGATTACTACCTGGTTACAGTCATGCTGTCAGGCATCAAGTGCC
CAACTTTTCGACGGGAAGCAGATGGCAGTGAACCTCCAGAGCCTTTTGTGTCAGAGCCAAATTTTTCAGTGA
CGCGACTGCTTCAGAGAGATGTTTCAGATCATTCTGGAGAGCTGCCACAACCAGAACATTCTGGGTACCATCCTTC
ATCCAAATGGCAACATCACAGAGCTCCTCCTGAAGGAAGGTTTCGCACGCTGTGTGGACTGGTCGATTGCAGTTT
ACACCCGGGGCGCAGAAAAGCTGAGGGCGGCAGAGAGGTTTGCCAAAGAGCGCAGGCTGAGAAATATGGAGAGACT
ATGTGGCTCCACAGCTAATTTGGACCAAAGGACAAGCAGTTTGTGCCAAGGTGATGCAGGTTCTGAATGCTG
ATGCCATTGTTGTGAAGCTGAACTCAGGCGATTACAAGACGATTACCTGTCCAGCATCCGACCACCGAGGCTGG
AGGGGGAGAACACCCAGGATAAGAACAAAGAACTGCGTCCCCGTGTATGACATTCTTACATGTTTGAGGCCCGGG
AATTTCTTCGAAAAAGCTTATTGGGAAGAAGTCAATGTGACGGTGGACTACATTAGACCAGCCAGCCAGCCA
CAGAGACAGTGCCTGCCTTTTCAGAGCGTACCTGTGCCACTGTCACCATTTGGAGGAATAAACATTGCTGAGGCTC
TTGTCAGCAAAGGTCTAGCCACAGTGATCAGATACCGGCAGGATGATGACCAGAGATCATCACTACGATGAAC
TGCTTGCTGCAGAGGCCAGAGCTATTAAGAAATGGCAAAGGATTGCATAGCAAGAAGGAAGTGCCTATCCACCGTG
TTGCAGATATATCTGGGGATACCCAAAAGCAAAGCAGTTCTGCTTTCTTCAGCGGGCAGGTCGTTCTGAAG
CTGTGGTGAATACGTCTTCAGTGGTTCTCGTCTCAAACCTCTATTTGCCAAAGGAACTTGCTTATCACCTTCT
TGCTTGCAAGCATTGAATGCCCCAGAGGAGCCCGAAACCTCCAGGCTTGGTGCAGGAAGGAGAGCCCTTCAGCG
AGGAAGCTACACTTTTCACCAAGGAACCTGGTGTGCAGCGAGAGGTGGAGGTGGAGGTGGAGAGCATGGACAAGG
CCGGCAACTTTATCGGCTGGCTGCACATCGACGGTGCCAACCTGTCCGTCTGCTGGTGGAGCACGCGCTCTCCA
AGGTCCACTTCACCGCCGAACGCAGCTCCTACTACAAGTCCCTGCTGTCTGCCGAGGAGGCCGCAAAGCAGAAGA
AAGAGAAGGTCTGGGCCCACTATGAGGAGCAGCCCGTGAGGAGGTGATGCCAGTGTGGAGGAGAAGGAGCGAT
CTGCTAGCTACAAGCCGTGTTTGTGACTGAGATCACTGATGACCTGCACCTTCTACGTGCAGGATGTGGAGACCG
GCACCCAGTTGGAGAAGCTGATGGAGAACATGCGCAATGACATTGCCAGTCACCCCTGTAGAGGGCTCCTATG
CCCCCGCAGGGGAGAGTTCTGCATTGCCAAATTTGTAGATGGAGAATGGTACCGTGCCCGAGTAGAGAAAGTCG
AGTCTCCTGCCAAAATACATGTCTTCTACATTGACTACGGCAACAGAGAGGTCTGCCATCCACCCGCTGGGTA
CCCTATCACCTGCCTTCAGCACTCGGGTGTGCCAGCTCAAGCCACGGAGTATGCCTTCGCCTTCATCCAGGTGC
CCCAAGATGATGATGCCCGCACGGACGCCGTGGACAGCGTAGTTTCGGGATATCCAGAACTCAGTGCCTGCTCA
ACGTGGAACACCTGAGTGCCGGCTGCCCCATGTACCCCTGCAGTTTGCAGATTCCAAGGGCGATGTGGGGCTGG
GCTTGGTGAAGGAAGGGCTGGTCATGGTGGAGGTGCGCAAGGAGAAACAGTTCCAGAAAGTGATCACAGAATACC
TGAATGCCCCAAGAGTCAGCCAAGAGCGCCAGGCTGAACCTGTGGCGCTATGGAGACTTTTCAGCTGATGATGCAG
ACTGCCCTCGTCCAGCTCTCTGTCCAACCTGTTGATTATGTGATTTTTCTGATACGTCCATTCTCAAATGCCAGT
GTGTTACATCTTCGCTCTGGCCAGCCCATCTGTATTTAAAGCTTTTGAGGCCCAATAAAATAGTACGTGCTGT
C

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FIGURE 2401

MASSAQSGSSGGPAVPTVQRGIIKMVLSGCAIIVRGQPRGGPPPERQINLSNIRAGNLARRAAATQPDADTPD
EPWAFPAREFLRKKLIGKEVCFTIENKTPQGREYGMIIYLGKDTNGENIAESLVAEGLATRREGMRANNPEQNRLS
ECEEQAKAAKGMWSENGSHTIRDLKYTIENPRHFVDSHHQKPVNAIIHVDRDGSVVRALLLPDYLLVTVMLSG
IKCPTFRREADGSETPEPFAAEAKFFTESRLLQRDVQIIIESCHNQNILGTILHPNGNITELLKEGFARCVDS
IAVYTRGAEKLRAAERFAKERRLRWRDYVAPTANLDQDKQFVAKVMQVLNADAIVVKLNSGDYKTIHLSSIRP
PRLEGENTQDKNKKLRPLYDIPYMFAREFLRKKLIGKKVNVTVDYIRPASPATETVPAFSERTCATVTIGGINI
AEALVSKGLATVIRYRQDDQQRSSHYDELLAAEARAIKNGKGLHSKKEVPIHRVADISGDTQKAKQFLPFLQAG
RSEAVVEYVFGSRLKLYLPKETCLITFLLAGIECPRGARNLPGLVQEGEPFSEEATLFTKELVLQREVEVEVES
MDKAGNFIGWLHIDGANLSVLLVEHALSKVHFTAERSSYYKSLLSAEEAAKQKKEKVWAHYEEQPVEEVMPVLEE
KERSASYKPVFVTEITDDLHFYVQDVETGTQLEKLMENMRNDIASHPPEGSYAPRRGEFCIAKFVDGEWYRARV
EKVESPAKIHVFYIDYGNREVLPSRLGTLSPAFSTRVLPAQATEYAFAFIQVPQDDDARTDAVDSVVRDIQNTQ
CLLNVEHLSAGCPHVTLQFADSKGDVGLGLVKEGLVMVEVRKEKQFQKVITEYLNQESAKSARLNLWRYGDFRA
DDADCPRPSSLSNC

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FIGURE 2402

TCGGAAGGGGCCAGGAGACACTGGAAGGTCCGGACGGCAGGGAAGGGGACGGGGTTCTTTCCAGTCCCCACCCGTG
TAGGGACACCTCTCCCCCTCATCCCCGATGTACCCTCGCTGAATCTGGGATGGGAGAGACGAACCGAGTCTAGG
CATCTGCGTAGCAGCGCCGGGGAGAGCGGGGAGCCCAGGGCGGAGCCCAGTCGACTCCCCGGATTCCCCTGCCCCG
CCCCCGGCACGAGGCCCCGCCCGGGCGGCCCGCCCCCTCCTCGGGACTCGACCGGGCTGCGCTCACTGCCCCAGCC
GGGGCCCCGGGAGCCTCCAGGCTCCCGCCCCGCCCTGAGCTGCGGCCTCCGCATGGAGGGGCCACTCACTCCACCA
CCGCTGCAAGGAGGCGGAGCCGCCGCTGTTCCGGAGCCCGGAGCCCGGCAACACCCGGGACACGAGACGGCGGGCG
CAGCGGTACAGCGCCCCGACTGCTGCAGGCCGGCTACGAGCCCCGAGAGCCCTAGATTGGACCTCGCTACACACCCG
ACGACACCCCGTTTCAAGACTATCTTACGTGGTCTTACTGGCAGGTGTTGGTGTCCAGATGGATCGCCTTCGCAAG
GCTAGCATGGCGGACTACCTGATCAGCGGCGGCACCGGCTACGTGCCGAGGATGGGCTCACCGCGCAGCAGCTC
TTCGCCAGCGCCGACGGCCTCACCTACAACGACTTCCTGATTCTCCCAGGATTCATAGACTTCATAGCTGATGAG
GTGGACCTGACCTCAGCCCTGACCCGGAAGATCACGCTGAAGACGCCACTGATCTCCTCCCCCATGGACACTGTG
ACAGAGGCTGACATGGCCATTGCCATGGCTCTGATGGGAGGTATTGGTTTCATTACCCACAACCTGCACCCCAGAG
TTCCAGGCCAACGAGGTGCGGAAGGTCAAGAAGTTTGAACAGGGCTTCATCACGGACCCCTGTGGTGTGAGCCCC
TCGCACACTGTGGGCGATGTGCTGGAGGCCAAGATGCGGCATGGCTTCTCTGGCATCCCCATCACTGAGACGGGC
ACCATGGGCAGCAAGCTGGTGGGCATCGTCACCTCCCGAGACATCGACTTTCTTGCTGAGAAGGACCACACCACC
CTCCTCAGTGAGGTGATGACGCCAAGGATTGAAGTGGTGGTGGCTCCAGCAGGTGTGACGTTGAAAGAGGCAAAAT
GAGATCCTGCAGCGTAGCAAGAAAGGGAAGCTGCCTATCGTCAATGATTGCGATGAGCTGGTGGCCATCATCGCC
CGCACCGACCTGAAGAAGAACCAGACTACCCTCTGGCCTCCAAGGATTCCCAGAAGCAGCTGCTCTGTGGGGCA
GCTGTGGGCACCCGTGAGGATGACAAATACCGTCTGGACCTGCTCACCCAGGCGGGCGTCGACGTCATAGTCTTG
GACTCGTCCCAAGGGAATTCCGGTGTATCAGATCGCCATGGTGCATTACATCAAACAGAAGTACCCCCACCTCCAG
GTGATTGGGGGGAACGTGGTGACAGCAGCCAGGCCAAGAACCTGATTGATGCTGGTGTGGACGGGCTGCGCGTG
GGCATGGGCTGCGGCTCCATCTGCATCACCCAGGAAGTGATGGCCTGTGGTTCGGCCCCAGGGCACTGCTGTGTAC
AAGGTGGCTGAGTATGCCCCGGCGCTTTGGTGTGCCCATCATAGCCGATGGCGGCATCCAGACCGTGGGACACGTG
GTCAAGGCCCTGGCCCTTGAGCCTCCACAGTGATGATGGGCTCCCTGCTGGCCGCCACTACGGAGGCCCTGGC
GAGTACTTCTTCTCAGACGGGGTGCGGCTCAAGAAGTACCGGGGCATGGGCTCACTGGATGCCATGGAGAAGAGC
AGCAGCAGCCAGAAACGATACTTCAGCGAGGGGGATAAAGTGAAGATCGCGCAGGGTGTCTCGGGCTCCATCCAG
GACAAAGGATCCATTCAAGAGTTTGTGCCCTACCTCATAGCAGGCATCCAACACGGCTGCCAGGATATCGGGGCC
CGCAGCCTGTCTGTCTTCCGTCCATGATGTACTCAGGAGAGCTCAAGTTTGAGAAGCGGACCATGTCCGGCCCAG
ATTGAGGGTGGTGTCCATGGCCTGCACTCTTACGAAAAGCGGCTGTACTGAGGACAGCGGTGGAGGCCGAGGTGG
TGGAGGGGATGCACCCAGTGTCCACTTTTGGGCACAGCCTCCCTCCATAACTGAGTGGTCCACAGATTGCACT
ACGGGTTCTCCAGCTCCTTTCCAGGCAGAGAGAGGGGAGGTCTTGAGGGGACTGCTGCCCCCTCACTCGGCATCC
CCTGCAGAGTCAGGACTGCTCCCGGGGCCAGGCTGCCCTGGGAGCCCCCTCCGAGCCCAGCCAGCCAGGCTCTC
AGGCCCTGCGCCTGCTCAGGTCTTTCTTGCTGCAGCCTGCTCCAGCCTGGCCCCCAGGGGAGGGCGGCC
CCTCCTGGCTTCTCCTGTAGGGACCTCCCTGCCCTAGCCTCCCAGGAAATGGTGTCTCCTGGCCCTGCCTCT
GGCCCTTCCCGGGCGCTGCCCTCAGCCATGTGGCACTTCTGAGCTCCTGACCTAGGCCAAGGGGAGGTCTCTG
CCCCCTTCCCGGGCCCTGGGCTACCTTGGGTCTGCTCCTCAGGCCGCTCCCTGTCCCTGGCCATGGGTAGGA
GACTGCCCTGGTCAAGGCCGCTGCTGTATTCTGACTACCACCGTCCCCAGGTGAACCATTCCTCCCTTCT
CCTCAGCTGCAGTCGAAGGCTTTAACTTTGCACACTTGGGATCACAGTTGCGTCATTGTGTATTAAATACTTGA
ATAAATCAAGCAGGT

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FIGURE 2403

TTTCCAGCCCCAGCCCCGGACCCTGCAGCCGCAGAGATGTTGACGCCTAAGAAGAACCGGATTGCCATTTATGAA
CTCCTTTTTTAAGGAGGATGGTCATGGTGGCCAAGAAGGATGTCCACATGCCTAAGCACCCAGAGCTGGCAGACAA
GAATGTGCCCCAACCTTCATGTCATGAAGGCCATGCAGTCTCTCAAGTCCCGAGGCTACGTGAAGGAACACTTTGC
CTGGAGACATTTCTACTGGTACCTTACCAATGAGGGTATCCAGTATCTCCGTGATTACCTTCATCTGCCCCCGGA
GATTGTGCCTGCCACCCTACCCCGTAGCCGTCCAGAGACTGGCAGACCTTGGCCTAAAGGTCTGTATGTGAGGAG
TGCTGTGCTACCTGGTGGCGACAAGAAAGCCGAGGCTGGGGCTGGGTCAGCAACCGAATTCTAGTTTAGAGGCGG
ATTTGGTCGTGGACGTGGTCAGCCACCTCAGTAAACTGGAGAGGATTCTTTTGCAATTGAATAAACTTACAGCCA
AAAAA

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FIGURE 2404

TGGGATTACAGGTAAGTGCCACCACACCCAGCTGATTTTTGTGTTTTTTGTAGAGACGAGGTTTCGCCATGTTTC
CCAGACTGTTCTCAAACCTCTGAGCTCAAAGCAGTCCACCCACCTTGGCCTCCCAAAGTGCTGGGATTACAGGTG
TGAGCCACCTTGCTCATTCTAGTTTAAACTTTGGAGTGGTTTTGTGTCTCCTGATTGGACTCCTGCAAATACAGAA
TTGATGCTAGGAAGGGTACCAGGAGATAGACGCACACAGATGGGATTGGGAATAGGTTTGGTTATCCAAGGAGC
AGTGCTGAGCTCCTTGCTAATGGGATATGGGATGCTGGTGATTTCAGTAAGTGACCTCAAATTTACTCAGGCTA
CCACATACTGTTGATTGTGATGAAATGCCAGTTGAAGCACCTGTCTGCGAGCTTAGGGGTGCTACAAGTTGACC
ACTGCAGCAGTAAAGATGACTCTGAAGAATGGCATGGGATGGATCCTTTCGAATGCACTTGAGCAGCGGTCTCCA
ACCACAGGGCCACAGAGCTGGAGCTGGATCTACCATGAAAGACCTCTGAATCCAGGAAGAGAGACTGACTGAGCA
ACATGTTATTTCAGGTGGGACCATCCAGTTGCAGGAAAACAAGCTTAAGACGCCCACTGATTCTACATTATGCTCC
TACCTCCCGGCAGCCTCTCCAGGCCCAGAACTTTCTCCAATCAGCCTCTACAGACCAAGCTCATGACTCACAATG
GCCTATTTAGGCCCATACCTACGTACGGCAGTCTCCGCAGATGAGCCTACTGCCCCACAACAGCCTCCACAGG
CACAGCTCCATCGTTACAATGGCCTCTTTAGACCCAGCTCCTGCCCTCCAGCCTTCTCTCCAGGCCCTGAACCTT
CTCAAGTCGACCTCACCAGGCCCAGCTCATGCTTCTTTGCAGCCTCTCCAGGCCCAGCTCCTGCATCTTGGTGGC
CCCTCCAGGCCCAGCCTCTGCCTCCCGTCGGCCTCTACAGTCCCAACATCTGCCTCACAGCAGATTCTTCACGCC
CAGCATCTGCCTCACTGTGGACCCCCAAGCCAAGCTCCCAACCTTTCAGCAGCTTCTACACACCCAGCTCCTGC
CACCCAGTGGCCTCTTTAGGCCAAGCTCATGCTTCACAAGGGCCTTTCAGGCCCAACTTTTGTCTCATGGCAAC
CTTCCCTGGCCAGATTCTGCCTGTCTCCAGCAGCCTAGACAGGCCCAGGGCCTCTCTACATGCAGCTTATGCC
TCACGGTGGCCTCTCCAGGCCCAACTCCTGTCCAGGACGTATCTCCGGGCCCCAAACTTACTCAAGTCAGACT
CTGTAGTCCCAACTGCTGCCTCCTGGTGGCCTATGAAGGCCCAAAATCTCCTCAAGTTGACCTTTCAGGCCCAG
CTCCTGCCTCCTGTGAGCGTCTACAGGCCCAACCTCTACGTATGGGGGCTTCTCCAGGCCCACCTCTTCTCTT
GGCTGGGTCTACAGGCACAACCTGCTGCCTCACAACAGCCTTTTTTGGCCAGTTCTGTCCAGCTCATGGCGGCC
AATGTAGGCCCAAACTTCTCAAGTCAAACCTCTCCAGGCCACCTTCTGCTTCCAGTGGCATGAACAGGCCCA
GCTTTGACTTGAGAACAGCCTCTGCAGGCCCTGCTCTTGCTCCAGGGGCTTTTCCAGGCCCAGCTCTTGCT
CATGGCAGCTGCCCCAGGCCAAATTTCTGCCTGCCTGCCAGCAGCCTCAACAGGCATAGCTCCTCCCTCACAGT
GCCCCATTTAGGCCCAACTCATGACTGTGCGGCCATTTCCAGGCCTAGTGCCTGCCTCGTGGCTGACTCTTGAAGC
CCAAACTTCTCCTCAAATCAGCCTTTTGCCCAACTTCTGTCTACTGTGCGACTCTACAGGCCAGCCTCTGCCTCAC
AGTGGACCCCTCCAGACCCAGATGGTGTCTCACTGTGGCATCCTCAGTCGAAGCTCCTGCCTTTCGGCAGCCTCTC
CAGGCCCAGCTCCTCCTGCCTCCAGTGGCCTCTTTCGGCCAGC

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FIGURE 2405

MLLPGLSRPRTFSNQPLQTKLMTHNGLFRPIPVVTAVSADEPTAQPPQAQLHRYNGLFRPSSCLPAFSPGP
ELSQVDLTRPSSCFFAASPGPAPASWWPLQAQPLFPVGLYSPNICLTADSSRPASASLWTPQAKLPTFQQLLHTQ
LLPPSGLFRPSSCFTRAFFGPTFVSWQPSLARFLPVSQQPRQAQGLSTCSLCITVASPGPTFPVGRHLRAQNLLK
SDSVVPTAASWWPMKAQNLLKLTFFGPAPASCQRLQAQPLRHGGFSRPTSSSWLGLQAQLLPHNSLFWPSSCPAH
GGQCRPKTSSSQTLQAHL LLPSGMNRPSFDLRTASAGPALASQGLFPGPALASWQLPQAKFLPACQQPQQA

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FIGURE 2406

TCTAATACCTATTGATCTGTCACTTTCTCCCATCACGCTCAGGTGGGACCATCCAGTTGCAGGAAAACAAGCTTA
AGACGCCCCTGATTCTACATTATGGTGAGTTCTATAATTATTTTATTATATATTACAGTGTAATAATGGAAATA
AAGTGCCTAATAAATGCAAATGTGCTTACATCTTTTGGCCCAGCTCCTACCTCCCGGCAGCCTCTCCAGGCCCAG
AACTTTCTCCAATCAGCCTCTACAGACCAAGCTCATGACTCACAATGGCCTATTTAGGCCCATAACCCTACGTCAC
GGCAGTCTCCGCAGATGAGCCTACTGCCCCACAACAGCCTCCACAGGCACAGCTCCATCGTTACAATGGCCTCTT
TAGACCCAGCTCCTGCCTCCCAGCCTTCTCTCCAGGCCCTGAACTTTCTCAAGTCGACCTCACCAGGCCCAGCTC
ATGCTTCTTTGCAGCCTCTCCAGGCCCAGCTCCTGCATCTTGGTGGCCCCCTCCAGGCCCAGCCTCTGCCTCCCCGT
CGGCCTCTACAGTCCCAACATCTGCCTCACAGCAGATTCTTCACGCCCAGCATCTGCCTCACTTGGACCCCTCCAG
ACCCAGATGGTGTCTCACTGTGGCATCCTCAGTCGAAGCTCCTGCCTTTCGGCAGCCTCTCCAGGCCCAGCTCCT
CCTGCCTCCCAGTGGCCTCTTTTCGGCCCCAGCCCAGCTCATGCCTCCCGGCGGCCTTCCCAAGCCCCGCTTTTGAC
TTTCGGTGGCCTCTGCAGGCCTCGACAAGGCCAGCCTCCTGCCTCCCGAAGGCCTGCACAGGCCCAGCCTCTGC
CTCACAGCGGACTCTC

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FIGURE 2407A

AGCCCAAACCGCGGCCCTAGCCCCGGCCGCACCCCCAGCCCGGCCAGCATGATGAACAACAGCGGCTACTCAGA
CGCCGGCCTCGGCCTGGGCGATGAGACAGACGAGATGCCGTCCACGGAGAAGGACCTGGCGGAGGACGCGCCGTG
GAAGAAGATCCAGCAGAACACATTACGCGCTGGTGCAATGAGCACCTCAAGTGCCTGGGCAAGCGCCTGACCGA
CCTGCAGCGCGACCTCAGCGACGGGCTCCGGCTCATCGCGTGCTCGAGGTGCTCAGCCAGAAGCGCATGTACCG
CAAGTTCCATCCGCGCCCCAACTTCCGCCAAATGAAGCTGGAGAACGTGTCCGTGGCCCTCGAGTTCTCTGAGCG
CGAGCACATCAAGCTCGTGTCCATAGACAGCAAGGCCATCGTGGATGGGAACCTGAAGCTGATCCTGGGCCTGAT
CTGGACGCTGATCCTGCACTACTCCATCTCCATGCCATGTGGGAGGATGAAGATGATGAGGATGCCCGCAAACA
GACGCCCCAAGCAGCGGCTGCTTGGCTGGATCCAGAACAAGGTGCCCCAGCTGCCCATCACCACCTTCAACCGTGA
CTGGCAGGACGGCAAAGCTCTGGGCGCCCTGGTGGACAACCTGCGCCCCCGTCTCTGCCCGACTGGGAGGCCTG
GGACCCCAACCAGCCCGTGGAGAACGCGCGGGAGGCCATGCAGCAGGCCGACGACTGGCTTGGGGTGCCCCAGGT
CATTGCCCCCTGAGGAGATTGTGGACCCCAACGTGGATGAGCATTCTGTTATGACCTACCTGTCCAGTTCCCCAA
GGCCAAGCTCAAACCTGGTGGCCCTGTTGATCCAAGCAGCTGAACCCCAAGAAAGCCATCGCCTATGGGCCTGG
CATCGAGCCACAGGGCAACACCGTGTGTCAGCCTGCCACTTACCGTGCAGACGGTGGACGCGGGCGTGGGCGA
GGTGTGTTCTACATCGAGGACCTGAAGGCCACACCGAGGAGGCTAAGGTGGTTCCCAACAATGACAAGGATCG
CACCTATGCTGTCTCCTATGTGCCAAGGTGCTGGGTACACAAGGTGACCGTGCTCTTTGCTGGCCAGAACAT
TGAACGCAGTCCCTTTGAGGTGAACGTGGGCATGGCCCTGGGAGATGCCAACAAGGTGTGAGCCCGTGGCCCTGG
CCTGGAACCTGTGGGCAATGTGGCCAACAAACCCACCTACTTTGACATCTACACTGCGGGGGCCGGCACTGGCGA
TGTTGCTGTGGTGATCGTGGACCCACAGGGCGCGCGGACACAGTGGAGGTGGCCCTGGAGGACAAGGGTGACAG
CACGTTCCGCTGCACATACAGACCTGCCATGGAGGGGCCACATACCGTGCATGTGGCCTTTGCGGGTGCCCCCAT
CACCCGCAGTCCCTTCCCTGTCCATGTGTGGAAGCCTGTAACCCCAACGCCTGCCGCGCCTCTGGGCGAGGCCT
GCAGCCCAAGGGTGTTGCGGTGAAAGAGGTGGCTGACTTCAAGGTGTTTACCAAGGGTGCCGGCAGCGGGGAGCT
CAAGGTACGGTCAAGGGGCCAAAGGGCACAGAGGAGCCAGTGAAGGTGCGGGAGGCTGGGGATGGTGTGTTTGA
GTGCGAGTACTACCCGGTGGTGCCTGGGAAGTATGTGGTGACCATCACGTGGGGCGGCTACGCCATCCCTCGCAG
CCCCTTTGAGGTACAGGTGAGCCAGAGGCAGGAGTGCAAAAGGTCCGGGCTGGGGTCTGGTTTGGAGACTGG
CCAGGTGGGCAAGTCAGCCGATTTTGTGGTGGGAAGCCATTGGCACCGAGGTGGGGACACTGGGCTTCTCCATCGA
GGGGCCCTCACAAGCCAAGATCGAATGTGACGACAAGGGGGATGGCTCCTGCGATGTGCGGTACTGGCCACGGA
GCCTGGGGAGTACGCTGTGCACGTCATCTGTGACGATGAGGACATCCGAGACTCACCTTCATTGCCCACATCCT
GCCCCCCCCACCTGACTGCTTCCCAGATAAGGTGAAGGCCTTTGGGCCTGGCCTGGAGCCTACCGGCTGCATCGT
GGACAAGCCCGCTGAGTTACCATTTGATGCTCGTGACGTGGCAAGGGGAGACCTGAAGCTCTATGCCCAGGACGC
CGACGGCTGTCCCATCGACATCAAGGTGATCCCCAACGGCGACGGCACCTTCCGCTGCTCCTACGTGCCACCAA
GCCATTAAAGCACACCATCATCATCTCCTGGGGAGGCGTAAACGTGCCCAAGAGCCCCCTTCCGGGTGAACGTGGG
CGAGGGCAGCCACCCGAGCGGGTAAAGGTGACGGCCCCGAGTGGAGAAGACAGGCCTCAAGGCCAATGAGCC
CACCTACTTCACGGTGGACTGCAGCGAGGCGGGGCAAGGCGACGTGAGCATCGGCATCAAGTGCGCCCCAGGCGT
GGTGGGCCCTGCAGAGGTGACATTGACTTCGACATCATCAAGAATGACAACGACACCTTACCGTCAAGTACAC
GCCACCAGGGGCGGGCCGCTACACCATCATGGTGTGTTGCCAACCAGGAGATCCCCGCCAGCCCCCTTCCACAT
CAAGGTGGACCCATCCACGATGCCAGCAAAGTCAAGGCCGAGGGCCCTGGGCTGAATCGCACAGGTGTGGAAGT
CGGGAAGCCCAACCACTTACGGTGCTGACCAAGGGAGCCGGCAAGGCCAAGCTGGATGTGCAGTTTGCAGGGAC
AGCCAAGGGCGAGGTTGTGCGGGACTTTGAGATCATAGACAACCATGACTACTCCTACACTGTCAAGTACACCGC
TGTCCAGCAGGGCAACATGGCAGTGACAGTGACTTATGCGGGGACCTGTCCCCAAGAGCCCCCTTTGTGGTGAA
TGTGGCACCCCGCTGGACCTCAGCAAAATCAAAGTTCAGGGCCTTAATAGCAAGGTGGCTGTGGGACAGGAACA
AGCATTTCTGTGAACACACGAGGGGCTGGCGGTGAGGCCAAGCCAGGCTGTGCGCTACATGCCCCCGGAGGAGGG
GCCCATCCCCGCAAGCTGGAGCCAGGCGGTGGAGCGGAAGCCAGGCTGTGCGCTACATGCCCCCGGAGGAGGG
GCCCTACAAGGTGGATATCACCTACGATGGTCAACCGGTGCCTGGCAGCCCGTTTGTGTGGAGGGTGTCTGCC
CCCTGATCCCTCCAAGGTCTGTGCTTATGGCCCCGGTCTCAAGGGTGGACTGGTAGGCACCCCCGCGCCATTCTC
CATCGACACCAAGGGGGCTGGCACAGGTGGCCTGGGGCTGACCGTAGAGGGCCCTGCGAGGCCAAGATCGAGTG
CCAGGACAATGGTGATGGCTCATGTGCTGTCAGCTACCTGCCACGGAGCCTGGCGAGTACACCATCAACATCCT
GTTTGTGAGGGCCACATCCCTGGCTCGCCCTTCAAAGCCACCATTCGGCCTGTGTTTGACCCGAGCAAGGTGCG
GGCCAGTGGACCGGGCCTGGAGCGCGGCAAGGTGGTGAGGCAGCCACCTTCACTGTGGACTGCTCAGAGGCAGG

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FIGURE 2407B

CGAGGCGGAGCTGACCATTGAGATCCTGTGCGGATGCCGGGGTCAAGGCCGAGGTGCTGATCCACAACAACGCGGA
TGGCACCTACCACATCACCTACAGCCCTGCCCTTCCCTGGCACCTACACCATTACCATCAAGTATGGCGGGCATCC
CGTGCCCAAATTCCCCACCCGTGTCCATGTGCAGCCTGCGGTGATACCAAGTGGCGTCAAGGTCTCAGGGCCCTGG
TGTTGAGCCACACGGTGTCTGCGGGAGGTGACCACTGAGTTCCTGTGGATGCAAGATCCCTAACAGCCACAGG
CGGCAACCACGTGACGGCTCGTGTGCTCAACCCCTCGGGGGCCAAGACAGACACCTATGTGACAGACAATGGGGA
CGGCACCTACCGAGTGAGTACACCGCCTACGAGGAGGGCGTGATCTGGTGGAGGTCTGTATGATGAGGTGCG
TGTGCCCAAGAGCCCTTCCGAGTGGGCGTGACCGAGGGCTGTGATCCCAACCGCGTCCGAGCCTTCGGGCCAGG
CCTGGAGGGTGGCTTGGTCAACAAGGCCAACCATTCACTGTGGAGACCAGGGGAGCGGGGACCGGGGGCCTTGG
CCTAGCCATCGAGGGTCCCTCGGAAGCCAAGATGTCTGCAAGGACAACAAGGATGGTAGCTGCACCGTGGAGTA
CATCCCTTCACTCCTGGAGACTATGACGTCAACATCACCTTCGGGGGGCGGGCCATCCAGGGAGCCCGTTCCG
CGTGCCAGTGAAGGATGTGGTGGACCTGGGAAGGTGAAGTGCTCAGGGCCAGGGCTGGGGGCTGGTGTGAGGGC
CCGGGTTCCCTCAGACCTTCACAGTGGATTGCACTCAAGCTGGCCGGGCGCCCTGCGAGGTGGTGTGCTGGGCCC
CACAGGTGTGGCCGAGCCTGTGGAGGTGCGGGACAATGGAGATGGCACCCACACTGTCCACTACACCCAGCCAC
TGACGGGCCCACACGGTAGCCGTCAAGTATGCTGACCAGGAGGTGCCACGCAGCCCCCTTCAAGATCAAGGTCTT
CCCAGCTCATGATGCCAGCAAGGTGCGGGCCAGCGGCCAGGCCTCAACGCCTCTGGCATCCCTGCCAGCCTGCC
TGTGGAGTTCACCATCGACGCACGGGACGCGGGCGAGGGGTGCTCACTGTCCAGATCTTGGACCCCGAGGGTAA
GCCAAGAAGGCCAACATCCGGGACAATGGGGATGGCACGTACACTGTGTCTACCTGCCGGACATGAGTGGCCG
GTACACCATCACCATCAAGTATGGCGGTGATGAGATCCCTACTCGCCCTTCCGCATCCATGCTCTGCCCACTGG
GGATGCCAGCAAGTGCCCTCGTCACAGTGTCCATTGGAGGCCATGGCCTGGGTGCCTGCCTGGGCCCTCGAATCCA
GATTGGGCAGGAGACGGTGATCACGGTGGATGCCAAGGCAGCCGGTGAGGGGAAGGTGACATGCACGGTGTCCAC
GCCGGATGGGGCAGAGCTCGATGTGGATGTGGTTGAGAACCATGACGGTACCTTTGACATCTACTACACAGCGCC
CGAGCCGGGCAAGTACGTATCACCATCCGCTTCGGGGGTGAGCACATCCCCAACAGCCCCCTTCCACGTGCTGGC
GTGTGACCCCTGCCGCACGAGGAGGAGCCCTCTGAAGTGCCACAGCTGCGCCAGCCCTACGCTCCTCCCCGGCC
CGGCGCCCGCCCCACACACTGGGCCACAGAGGAGCCAGTGGTGCCTGTGGAGCCAATGGAGTCCATGCTGAGGCC
CTTCAACCTGGTCATCCCTTCGCGGTGCAGAAAGGGGAGCTCACAGGAGAGGTGCGGATGCCCTCGGGGAAGAC
GGCACGGCCCAACATCACCGACAACAAGGACGGCACCATCACGGTGAGGTATGACCCACTGAGAAAGGCCTGCA
CCAGATGGGGATCAAGTATGACGGCAACCACATCCCTGGGAGCCCCCTTACAGTTCTATGTGGATGCCATCAACAG
CCGCCATGTGAGTGCCATGGGCCAGGCCGTGAGCCATGGCATGGTCAACAAGCCAGCCACCTTCACTATTGTAC
CAAAGATGTGAGAAAGGGGTCTGTCACTGGCCGTGGAGGGCCCATCCAAGGCAGAGATCACTGTGAAGGACAA
CAAGGATGGCACCTGCACCGTGTCTATCTGCCGACTGCGCCTGGAGACTACAGCATCATCGTGCCTTCGATGA
CAAGCACATCCCGGGGAGCCCCCTTACAGCCAAGATCACAGGTGATGACTCCATGAGGACCTCACAGCTGAATGT
GGGCACCTCCACGGACGTGTCACTGAAGATCACCGAGAGTGATCTGAGCCAGCTGACCGCAGCATCCGTGCCCC
CTCGGGCAACGAGGAGCCCTGCTGCTGAAGCGCCTGCCCAACCGGCACATTGGGATCTCCTTCAACCCCAAGGA
GGTCGGGGAGCACGTGGTGAGCGTGCGCAAGAGTGGCAAGCATGTCACCAACAGCCCCCTTCAAGATCCTGGTGGG
GGCATCTGAGATCGGGGACGCCAGCAAGGTGCGGGCTTGGGGCAAGGGGCTTCCGAGGGACACATTCCAGGT
GGACATCAACTGTGAGGACATGGAGGACGGGACATGCAAAAGTCACTACTGCCCCACCGAGCCCGGCACCTACAT
CATCAACATCAAGTTTGTGACAAGCACGTGCCTGGAAGCCCCCTTCACTGTGAAGGTGACCGGCGAGGGCCGCAT
GAAGGAGAGCATCACCCGGCGGAGACAGGCACCTTCCATCGCCACCATCGGCAGCACCTGTGACCTCAACCTCAA
GATCCAGGAAACTGGTTCCAGATGGTGTCTGCCAGGAGCGCCTGACACGCACCTTACACGCAGCAGCCACAC
CTACACCCGCACGGAGCGCACGGAGATCAGCAAGACGCGGGGCGGGGAGACAAAGCGCGAGGTGCGGGTGGAGGA
GTCCACCCAGGTGCGCGGGGACCCCTTCCCTGCTGTGTTTGGGGACTTCCCTGGGCCGGGAGCGCCTGGGATCCTT
CGGCAGCATCACCCGGCAGCAGGAGGGTGAGGCCAGCTCTCAGGACATGACTGCACAGGTGACCAGCCCATCGGG
CAAGGTGGAAGCCGAGAGATCGTCGAGGGCGAGGACAGCGCCTACAGCGTGCCTTTGTGCCCCAGGAAATGGG
GCCCCATACGGTGCCTGTCAAGTACCGTGGCCAGCACGTGCCCGGCAGCCCCCTTTCAGTTCACTGTGGGGCCGCT
GGGTGAAGGTGGTGGCCACAAGGTGCGGGCCGGAGGCACAGGGCTGGAGCGAGGTGTGGCCGGCGTGCCAGCCGA
GTTTCAGCATCTGGACCCGGGAGGCTGGCGCTGGGGGCTGTCCATTGCTGTGGAGGGTCTAGCAAAGCGGAGAT
TGCATTTGAGGATCGCAAAGATGGCTCCTGCGGCGTCTCCTATGTCTCCAGGAACCAGGTGACTATGAGGTCTC

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FIGURE 2407C

CATCAAGTTCAATGATGAGCACATCCCAGACAGCCCCCTTTGTGGTGCCTGTGGCCTCCCTCTCGGATGACGCTCG
CCGTCTCACTGTCAACAGCCTCCAGGAGACGGGGCTCAAGGTGAACCAGCCAGCGTCCTTTGCCGTGCAGCTGAA
CGGTGCCCCGGGGCGTGATTGATGCCCGGGTGCACACACCCTCGGGGGCTGTGGAGGAGTGCTACGTCTCTGAGCT
GGACAGTGACAAGCACACCATCCGCTTCATCCCCACGAGAATGGCGTCCACTCCATCGATGTCAAGTTCAACGG
TGCCACATCCCTGGAAGTCCCTTCAAGATCCGCGTTGGGGAGCAGAGCCAGGCTGGGGACCCAGGCTTGGTGTC
AGCCTACGGTCTCGGGCTCGAGGGAGGCACTACCGGTGTGTTCATCAGAGTTTCATCGTGAACACCCTGAATGCCGG
CTCGGGGGCCTTGTCTGTCAACATTGATGGCCCCTCCAAGGTGCAGCTGGACTGTCGGGAGTGTCCTGAGGGCCA
TGTGGTCACTTATACTCCCATGGCCCCTGGCAACTACCTCATTGCCATCAAGTACGGTGGCCCCCAGCACATCGT
GGGCAGCCCCCTTCAAGGCCAAGGTCACTGGTCCGAGGCTGTCCGGAGGCCACAGCCTTCACGAAACATCCACGGT
TCTGGTGGAGACTGTGACCAAGTCCTCCTCAAGCCGGGGCTCCAGCTACAGCTCCATCCCCAAGTTCTCCTCAGA
TGCCAGCAAGGTGGTGAAGTCCGGGGCCTGGGCTGTCCCAGGCCTTCGTGGGCCAGAAAGTCTCCTCACCCTGGA
CTGCAGCAAAGCAGGCACCAACATGATGATGGTGGGCGTGACGGCCCCAAGACCCCTGTGAGGAGGTGTACGT
GAAGCACATGGGGAACCGGGTGTACAATGTACCTACACTGTCAAGGAGAAAGGGGACTACATCCTCATTGTCAA
GTGGGGTGACGAAAGTGTCCCTGGAAGCCCCCTTCAAAGTCAAGGTCCCTTGAATCCCAAAGTGCCTCCCCAGCC
TCAGCCCCACCTCCAGCCACACACACATTACACACACACACACACACACAAATGTGCCACACCCAGACACGC
ACAGAATCAGACACTACAAACACCTGCCTTGGGGGTGAAGTGAAGGCCAGCCTCCCCACCCACCGCGCCCCAG
GGGTTGGAGGACCTTGTCTGTGTCAAGACAGTGTCCCTCCCTGGGAATGTGACATGAGGGCCGACTGGGGCCAGG
CTCAGGGGCGAGAGGCTGGGACACAAGGGGCTGGCGAGGGCTGCGAGGCCAGGGAAGCCCTGAGTTTCTGGCGGGG
CTGAGCAGTGGGGGAGCATTGTGTTGTGGGTGTCTGTGTGTGAGGTACCCCTCAAACATGCACCGCCGGCCAGATA
CCCTCCTGACCCCGAGGACTTGGTCTGGTCTCTCTGGTGGCTACAACCCAGAGTTTAAAGGACTTGAAAGGAA
AGCACAATCAGAGAAGAAAACAGCCCCGAACCAGCAGGAGTGGCCTGGCACATGGACCGGCCTGAGCGATGTGC
ACTCCACCCAAGCCAGGCTCCCAGGGGGCCTGATTTCTCTCTCACTGTCTCTTTTTTAAATGGTTGCACGGCT
CTGCCCCATGGGGGGCCTTTTTTACACACTGCGAGGCCAGCTTTCTAGGGGACTTTTGCACATGTCATGCAGCT
CAGCTGGGAGCTGCTTAGGTGGAAGTCCAAATAAAGTGC GGCTGTGCG

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FIGURE 2408

MAPGNYLIAIKYGGPQHIVGSPFKAKVTGPRLSGGHS�HETSTVLVETVIKSSSSRGSSYNsipKFSSDASKVVT
RGPGLSQAFVGQKNSFTVDCSKAGTNMMVGvHGPKTPCEEVYVKHMGNRVYNVtyTVKEKGTTSLSSSGVTKVS
LEAPSKRSRSLESQKCLPSLSPHLQPNTHYIHTHTHTNVPHPDHTQNQTLQTPALGVK

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FIGURE 2409A

GGAGGCGGGGCGGACCAAGAGCAGGAGCTGGAGTCTGAGCCGGTGGTTGCAGCGGAGGCGGTGATCTCGGTGCAG
GTTGTGTTCAGCCGCGGCTGCCGCCAAGGTGCCCTGAGGTGGAGCTGAAGGACCTGAGCCCCCTCCGAGGCGGAGTCG
CAACTAGGACTGAGCACGGCCGCCGTGGGCGCCATGGCCCCCGGCGGGCGGTGGAGACCCTGAGGCTCCAGCT
CCCGCCGCGGAGCGGCCCGCGGTCCCCGGCCCGGGCTCGGGGCCCCGCCGCCGTCTCAGCCCCGCCCGGGGAAG
GTGCCTCAGGCGTCGGCCATGAAGCGGAGCGACCCACATCACCAGCACCAGCGGCACCGCGACGGCGCGGAGGCC
CTGGTCAGCCCCGACGGCACCGTCCAGGAGCGCCGCGCACAGTCAAGAAGCAGATCCAGTTTGTGTGACCAGAAG
CAAGAATTCAACAAACGTCCACCACAAAATTGGACGTCGCTCTTTGTCTCGTTCCATTTCTCAGTCATCTACTGAC
AGCTACAGCTCAGCGGCTTCATATACAGATAGCTCTGATGATGAGACATCGCCAGGGACAAGCAGCAAAAAGAAC
TCTAAGGGAAGCAGTGACTTCTGTGTTAAGAACATCAAACAGGCAGAGTTTGGACGAAGAGAAATTGAAATTGCT
GAACAAGAAATGCCGTGCATTGATGGCTTTGAGGAAGAGAGCTCAAGGAGAAAAGCCTTTGGCTGGAGCCAAAATC
GTGGGTTGCACACACATCACTGCTCAGACTGCTGTGCTTATGGAACTCTGGGTGCTCTGGGGGCCAGTGCCGA
TGGGCTGCCGTGCAACATCTATTCCACTCTCAATGAAGTGGCTGCTGCTCTAGCAGAAAAGTGGAATTTCTGTTTTT
GCCGTGGAAGGGAGAGTCAGAAAGATGACTTTTGGTGGTGTATCGATAGATGTGTGAATGTGGAGGGCTGGCAGCCA
AACATGATCTTGGATGATGGAGGGGATCTTACCCACTGGATTTATAAAAAGTATCCCAACATGTTTAAGAAAATC
AAGGGCATAGTAGAGGAGAGTGTACTGGAGTTCACAGGCTGTACCAACTGTCCAAAGCTGGGAAGCTGTGTGTT
CCAGCCATGAATGTCAATGACTCAGTCACCAACAGAAATTGACAACCTCTACTGTTGCCGTGAATCAATTCTT
GATGGACTTAAAAGGACAACAGACATGATGTTTGGTGGAAAGCAAGTGGTAGTCTGTGGCTATGGAGAGGTGGGG
AAAGGTGCTGTGCTGCCCTGAAAGCCATGGGCTCCATTGTGTATGTAAGTGAATTTGACCCCATCTGTGCCCTG
CAAGCCTGTATGGATGGATTTGACTGGTGAATTTAAATGAGGTATCCGACAAGTGACATTGTTATTACCTGT
ACAGGTAACAAGAATGTGGTAACCAGAGAGCACTTGGACCGTATGAAGAATAGCTGCATCGTTGTAACATGGGA
CATTCACACAGAGATTGACGTGGCGAGTCTGCGGACACCAGAACTGACCTGGGAGCGAGTGAGATCTCAAGTT
GACCATGTGATATGGCCTGATGGCAAGAGGATAGTACTGCTGGCAGAGGGCCGCTGCTGAACCTTAGCTGCTCC
ACAGTGCCCTACATTTGTGCTCTCAATCACTGCTACTACTCAGGCTCTTGCTTGATAGAGCTTTACAATGCTCCT
GAGGGTCGCTATAAGCAGGATGTCTACCTGTTGCCAAGAAGATGGATGAGTATGTGGCCAGCCTACACCTGCCT
ACCTTTGATGCCCACTTGACAGAGCTGACAGATGAACAGGCCAAGTATCTGGGACTCAACAAGAATGGGCCCTTC
AAGCCTAATTACTACAGGTATTAAGTTCCTGTAACCTCAAACCAGAATTTTAAAGGAATAGAAGTCCAAGCCTTTT
CTCCACTACTATACAAGAAAGAAATTCAGCAAGCTGCTTCTCCAATCAAAGCTGCCTGCCGTGCTCACCCTGTGTG
TTAGGTTATTTATTTATTTAAATCAAGAATCCTGTGCTGTAGTGTGGCCAGAGTGTGGTTACTGCCCTGAGG
GCCATGAAAGCCACAGAGGATGGGCTGAGGAAGGAAAGAAATGGGGTTACTGCTCCAGTGCATCAATTGCATCA
TTCCCCATTGACTGAATCCTCAGCAGTGGCCGTTTTTCTCTTGTCCAGGCTCACGAGTTAGTCCAGGGATTCCA
TACTCCCTATTCCCTGGAGTTTTCTGGAATAAATTTTCAGCACCTGCTTTTCTCAGCTTGCGCCCTTCCCCGGGTG
AGGCCGTTTGGAAATTAACATGGCCAGTGTTCACACAAGATTGGGTTCCCAATCTTGACCATCACTATCACTGCC
TTCTTTATATAAAGGCTAATAAGGAAGGAGTGTATTTATGGCTTTGCCAAGCTACATCAAGAAGTCACTGTGC
TGTGCCCTACCAGGGGTCTCCTTTCTTACCCAGGACTCCTTTCTCTCCTTGAATATTTATGTCCATTTTAACT
TCTTGGTTGCAAGAGGGATGTGCTTCCATTATTTCTCCACAGTTTTTGGTATTTGTGAGACATTTGTTCTGCTGT
CTTTCTAATCCAGCCAACGTCTGCTCAGGAAGTGGGGCCAGCTCCACTGGGACCCATAGTTTTACTTCTTGTCA
TTTGATTGGATAGTTTTCCAAGGAAGCCCCCTCCAGATTGGCACTATCTCAGAAAAGGAGAGCTTGTGTGAAACAC
TGCTTCTGAAACTTCTGCTATTGCTTAAAGCTACGCTGAAACTGAGTAGGGAAAGGCATACTTTTCCAGGGA
CTTAGGGGGATAGGCTTTGGAAATGGGACAGGTCTTCAGACTCACAGCTTGATACCCTAACAAGCAGAGTATA
TTTATTTGTTTCCCAGGAAGGCCATTGCAAGTTTACTGGCTGAGGGATACAGAGATGAAATTGTAACTGTATCC
AGATTATCAAAGCTAATTTGACTAGTTTGAACCTCGTCAGACATTCACTCTTGGCCATTGCCATGGATGAAAC
CGAGATCTGCAGTCTGATCTGTGGACTTCTCTGCTGGCATACTTTTATGATTTAACTCTTCCATTTGATGATT
CTGTATTTCAAGAGTCAAGTTTCTTGAAGTAACTCCAGTGCTACAAAAAGAAATAGTAATGTGGTGTGGGCAGCGTGA
CATTTTATGTCCCAACCAAAAATTTGGATTCTTTTGGAGACTGATCTGTTGGTCTCAGGCATTTCAATAGGACCA
GATTGGTTCTAAGAGTTAGTCTGGACTGGCCCTAGGAACTTGAATTAATAAGCCTCTTCCCCTTACCGATCCT
TTTTAACACTCTCAGGTTTGTGTTTCCCACTTTTTCTCTATGCTGGTCTGCCTCAAAGTCTCAAGACCAAGGT
GACTCAAGATAACACCAGACCACGCATGATCACCAAAACCTTCCCATCTGATTCTCTTCTTCTACCTCTACCTT
CTCCAACCTCTCTGGTCTTCACATATACTCTCAAAGCTAGTCTGAAAGTGACCTTACTTTTCCGAAGTAGGGAAG

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FIGURE 2409B

TGGAACTTTGGTAAATGACTGTTTGCCTCATTTAATAGTATACAGGCTCAGCCCATAGACTACAGTTCTTCAGAG
GCCATATGTCTCAGCAAGTACTGGTTATATTCTTTTTTTGTAAGGAAGATCATAAATGCTAAAAATTCCACTAAG
CCATTCAAGTTCTTCCTTTTGCCTACCTAGTCCCTGATTTTTGTATTAAATTGGTTCCCTTTAGCAAGGGATTCAAGAT
CTTTGTACCTTATCTTATATCCAGAGCAGATTCCATTTGGCAGATAGATGGTCTCTAGCCATTGTATTCTTAGA
CCAAAAATCATAACCTGCTGTTTCTCAGCAAAGCCTTGCTCTCTGGAGCTTACTATGTGCTGGTACTTAAAGAGT
ACATTCTGCCTTGCTGTAGTGAAGAGACCCACTCCAAATAAAAAAGGGGCCACACGGGGCTTCTAAGTTAGGTTG
CCAGTGTGCTGCCCATGATGAGTTATTTGCCCTCTGAGTTTCAGATGACCTCTCTGTAGGGACACTGTGTTATCA
ACCATTAAGAAGAAAGAACCACAAGCCTCCCAAGTATTTGGGTTCTATCTTAGGGTTGAAATCTGGTCATTATTC
CCTCTACCCCTTGGAATCAGAGCAATGTGTCTTCTTTCCCTCCAACCTCTTACCTTAGATGCATCCTGGTTATCTGG
AAGCATGGGAAAGAAGGCTACTTATCTCTTTGTATGTGGCTCCAGTCTGTGAGGATACATAACATTTCTCTACA
ATGAATCTGTGCTAATATTTTGCCCTTCTTTCTTTCTTTCTTTTCACCCCTTAGAGACAGGGTTTCACTATGTTGC
CCAGGCTGGTCTCAAACCTCCTGGGCTCAAGCAATCCTCCTGCCTCAGCTTCTTGAGTAGCTGGAACACAGGTGT
GTGCTACCGTGCCCTGGCACTTTTTTGCCCTTCTTAATGGAGATATTCAGTTTTCTTTTTTTTCATTTAAACAAAGAA
AAAAATGTATCTACTCTACCTTCCCTCTGCTCTCCTCCCTCCCTATCCTACTTGCCCATATGAGCACGGCTCCC
CATGGCCACATACTCCTGCAAAGCTTTTATGCTGCTTCGCTTTTCTCTAAACAGATCTGATATTGCTGCTCCTGT
GGTTTTCTCAAAATTAACTTTGCCGTGGTTTTTAAAAAGGAATCAAAATGCATTGTTGCATTAAAGCTTTTTCAAT
AAAGGAAAATTACGGAAGGAAAATAGGCAACACCAGCAAATTATATGTGGACAGGTTCTAAACTCTATATATACA
TATATATATATATATCTATATATCTATATACGTAATCATCTAGTTCTGTCACTTACTGAAAGGAATAACACTTC
TAAAGATCACCATTTCTGAGAAGTTCTTGGAATCTTTATGTCTAAGTGATTGTATTAGATCAGCAATAATGACT
ATGTAATCTCAAAAAACAAATAAAATATTCTTAACATGG

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FIGURE 2410

MSVQVVSAAAAKVPEVELKDLSPSEAESQLGLSTA AVGAMAPPAGGGDPEAPAPAAERPPVPGPGSGPAAALSP
AAGKVPQASAMKRSDPHHQHQRHRD GGEALVSPDGT VTEAPRTVKKQIQFADQKQEFNKRPTKIGRRSLRSISQ
SSTD SYSSAASYTDSSDDETS PRDKQQKNSKGSSDFCVKNIKQAEFGRREIEIAEQEMPALMALRKRAQGEKPLA
GAKIVGCTHITAQTAVLMETLGALGAQCRWAACNIYSTLNEVAAALAESGFPVFAWKGESEDDFWWCIDRCVNVE
GWQPNMILDDGGDLTHWIYKKYPNMFKKIKGIVEESVTGVHRLYQLSKAGKLCVPAMNVNDSVTQKFDNLYCCR
ESILDGLKRITDMMFGGKQVVVCGYGEVGKGCCAALKAMGSIVYVTEIDPICALQACMDGFRVLVKNLNEVIRQVDI
VITCTGNKNVV TREHLDRMKNSCIVCNMGHSNTEIDVASLRTPELTWERVRSQVDHVIWPDGKRIVLLAEGRLN
LSCSTVPTFVLSITATTQALALIELYNAPEGRYKQDVYLLPKKMDEYVASLHLP TFD AHLTELTDEQAKYLGLNK
NGPFKPNYYRY

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FIGURE 2411

AGTTCCTGGTCCAGAACTTTACACAGAAAAGGTGCTCAAAGGATATTTGTTTAATGAATGTGGTATGCTGACATT
TAAACAGGACAAAACCTTGTAGAACCTTCATGGAGGAACACGGAGTGACCCAAACCGAACATATGGCTACCATAGAA
GCACATGCAGTGGCCCAGCAAGTGCAGCAGGTCCATGTGGCTACTTACACCGAGCATAGTATGCTGAGTGCTGAT
GAAGACTCGCCTTCTTCTCCCGAGGACACCTCTTACGATGACTCAGATATACTCAACTCCACAGCAGCTGATGAG
GTGACAGCTCATCTGGCAGCTGCAGGTCCCTGTGGGAATGGCCGCTGCTGCTGCTGTGGCAACAGGAAAGAAACGG
AAACGGCCTCATGTATTTGAGTCTAATCCATCTATCCGGAAGAGGCAACAAACACGTTTGCTTCGGAAACTTCGA
GCCACGTTAGATGAATATACTACTCGTGTGGGACAGCAAGCTATTGTCTCTGTATCTCACCCCTCCAAACCTAAC
CCTGTCTTTAAAGTGTTTGGTGCAGCACCTTTGGAGAATGTGGTGCGTAAGTACAAGAGCATGATCCTGGAAGAC
CTGGAGTCTGCTCTGGCAGAACACGCCCTGCGCCACAGGAGGTAACTCAGAACTGCCGCTCTCACCATCGAC
GGAATTCAGTCTCTGTGGACAAAATGACCCAGGCCAGCTTCGGGCATTTATCCAGAGATGCTCAAGTACTCT
ACAGGTTCGGGGAAAACAGGCTGGGGGAAAGAAAGCTGCAAGCCCATCTGGTGGCCTGAAGATATCCCTGGGCA
AATGTCCGGAGTGATGTCCGCACAGAAGAGCAAAAGCAGAGGGTTTCATGGACCCAGGCACTACGGACCATAGTT
AAAACTGTTATAAACAGCATGGGCGGGAAGACCTTTTGATGCTTTGAAGATCAGCAACGCAACACAGGCC
ACAGCCACACATAGTATAGCTCATCTTGTACCATCACAGACTGTAGTCCAGACTTTTAGTAACCTGTATGGCACT
GTCTCACTTATCCAGGTTGGTACGGGGGCAACAGTAGCCACATTGGCTGATGCTTCAGAATTGCCAACACGGTC
ACCGTTGCCCAAGTGAATTATCTGCCGTGGCTGATGGAGAGGTGGAACAAAATTGGGCCACGTTACAGGGAGGT
GAGATGACCATCCAGACGACGCAAGCATCAGAGGCCACCCAGGCGGTGGCATCGTTGGCAGAGGCCGCACTGGCA
GCTTCTCAGGAGATGCAGCAGGGAGCTACAGTCACTATGGCGCTTAACAGCGAAGCTGCCGCCCATGCTGTGCGC
ACCTTGGCTGAGGCCACCTTACAAGGTGGGGGACAGATCGTCTTGTCTGGGGAAACCGCAGCAGCCGTGGGAGCA
CTTACTGGAGTCCAAGATGCTAATGGCCTCTTTATGGCAGATCGTGAGGTGCGAAGTGGAATCCTGACTGACAAA
GCCACAGGCCCTGGTCCAGATCCCTGTGAGCATGTACCAGACTGTGGTGACCAGCCTCGCCCAGGGCAACGGACCA
GTGCAGGTGGCCATGGCCCCGTGACCACCAGGATATCAGACAGCGCAGTCACCATGGACGGCCAAGCTGTGGAG
GTGGTGACATTGGAACAGTGACATACAGCCATATTATGGCATCGTTTTCTAGTCTACTTCAAAATTTTTTACACG
TTTGCAGAGGTGCAATCAAATGGAATTAAGTCTCTCGACTTTGGAAGGAAAGTTTTGTAAACCTTTTTTTTTTA
AAAGGAAGAAAGCGGATTTTGGAATTGCATTTTTTAAAGCACCCTCTTGATTTTCTGGGATTGGTGAAGAACT
GCATTGTCAATTTCACTGTCCCAAAAAAGCCAAATTGTGGCAGGACTTCTTCTGCGGAAATGTGTGTGTATACT
TATGTGTGTGTATGTGTGAGTGTGAATATATGTATATGTGTACATATGGACATACACATTTACATATATATAAAG
TATATATATACATATATATATATATATATGTATGAAACCCGCATGGAATTATCTGTATGAAATCAAGGTGCGCTG
TGGAACAATAATTCACCCAGTTTAGTGGGTGGTAGGGTACGTGGCCAGACACAGTCACCCAGTTTTTGTTCATA
CCAGGGTCATGCGTTGAGCTACTGACAACTCAGGCGGAGGTGACCATGCCCTTACCAAAGCTGCCCTCCAGTG
GCCACACAGAACTCTCCCTGCTGGACTCACCTGAGGAAAGAGGCTCCAGCATGGGGTGGGTGAGAGATGTGCTTG
CAAGGTCCAGGGACTGCGTGGTCTGCCAGCTGAGATGCTCCTCGGGCTGGCCCAGGTGCTGACCTTGCCACAGGC
AGATGAATGTCTTGAAAGCTCCCGGGCCTCAGCCTCCCATCTCCTCTCCTTCCCAGGAATCCTTGATCTCATGAC
TATTAATAATGTTGCTCTGGTTTTTAAGGTCACTCCTGAATTGCTCGTATATATGAACTGAAGGTAACCGAAGTATT
AGGGGTTTGAGGAGTGCGTGCGTGTAAAGTGTGCTTGTGTGTGTGCGTGATGGTGGGGGAGAGGATGGGAAGGGG
GCGGGGGCAGTGGAAGGGGAAAGGAAAGGAAAGAAAAATCGTCTAGACCAGGATACACCCGTGGGAGCAATTTTCT
CTACTGTCTGTAGCTTCACAGAGGAGGCGCTGGAATGAACAAGAAGAGACATCTGGTCTGTGGCCACAGCACCT
GAACGCCCCCTGATCTTGTGTGATCTTGGAAAGCTAAGCTTGGTTGGGCCCGGTACGTACGCGGAAGGGAAGAAGG
ACACCTGGCCATAGAAAAACAGCTGAGGGTGTGTTGCTGTGTTCTGGATCAGGCCCTGCTTCAGAAGGGACTCCTG
GAGGCCCATGTTCTTGATGCAACCTCGTGGCCAGGCCGGGAGCAGCTTGCTCCTCAGAGGTGTTGACTATCT
GGGTGTTCTTGGTAAC

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FIGURE 2412

MEEHGVQTTEHMAITIEAHAVAQQVQVHVATYTEHSMLSADSDSPSSPEDTSYDDSDILNSTAADEVTAHLAAAG
PVGMAAAAVATGKKRKRPHVFESNPSIRKRQOTRLLRKLRLATLDEYTTRVGQQAIVLCISPSKPNPVFKVFGAA
PLENVVRKYKSMILEDLESALAEHAPAPQEVNSELPPLTIDGIPVSVDKMTQAQLRAFIPEMLKYSTGRGKPGWG
KESCKPIWWPEDIPWANVRSDVRTEEQQRVSWTQALRTIVKNCKYQHGREDLLYAFEDQQTQTQATATHSIAHL
VPSQTVVQTFSPNDGTVSLIQVGTGATVATLADASELPTTVTVQVNYSAVADGEVEQNWATLQGGEMTIQTTQA
SEATQAVASLAEAAVAASQEMQOGATVTMALNSEAAAHAVATLAEATLQGGGQIVLSGETAAAVGALTGVQDANG
LVQIPVSMYQTVVTSLAQGNGPVQVAMAPVTTTRISDSAVTMDGQAVEVVTLEQ

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FIGURE 2413

GCCTCAAGAGGCGGATATTAACCTCCCAGGACGGAAGTTCCGGAGCCTTCAAACCTCTCGGGGAAGCAACTCGGCA
GCGGACCAAGATGGCGGCGCCCTGTGAGGGACAAGCGTTTGCCGTAGGGGTTGAAAAGAAATGGGGTGCAGTAGT
TCGCTCCCCAGAAGGGACCCCCAGAAAATCCGGCAGCTGATAGATGAGGGGATTGCCCCGAAGAGGGAGGCGT
GGACGCGAAGGACACGTCTGCCACATCCAGTCAGTTAATGGATCACCCCAAGCGGAACAACCTTCATTGGAATC
TACAAGCAAAGAAGCCTTCTTTAGCAGAGTGGAACATTTTCTTCTTTGAAATGGGCAGGTAAGCCCTTTGAGCT
GTCTCCACTCGTCTGTGCAAAATATGGCTGGGTACAGTGGAATGTGATATGCTCAAGTGCTCTAGCTGTCAAGC
TTTTCTCTGTGCCAGTTTACAACCAGCTTTTGACTTTGACAGATATAAGCAACGATGTGCTGAGCTGAAGAAAGC
CTTGTGTACTGCCCATGAGAAGTTCTGTTTCTGGCCAGACAGCCCATCCCCAGACCGATTGGGATGTTGCCCT
GGATGAGCCTGCTATTCTTGTAGTGAATTCCTAGATCGTTTTCAAAGCCTTTGTCACTTGGACCTCCAGCTTCC
TTCCCTAAGGCCGAGGACTTGAAAATATGTGCTTGACAGAAGACAAGATCAGTCTTCTCCTACACTTGCTTGA
AGATGAACCTTGATCACCGAAGTGTGAGAGAAAACTACAATCAAATTAGGCTCAGACATCCAAGTCCACGTCAC
TGCCTGTATTCTCTCTGTGTGTGGCTGGGCGTGTAGTTCCCTCTTTGGAATCCATGCAGCTCTCCCTGATAACATG
TTCGCAATGTATGAGGAAGGTGGGCTCTGGGGCTTCCAGCAGATTGAATCGTCCATGACTGACCTGGATGCATC
CTTTGGCCTGACCAGCTCCCCAATCCCAGGCCTTGAGGGGCGACCAGAGCGCTTACCTCTGGTGCCTGAATCTCC
TCGGAGGATGATGACCCGGAGCCAGGATGCCACTTTCTCCCCAGGCTCAGAGCAGGCTGAAAAGAGCCCTGGTCC
CATTGTCTCTCGAAGCTCGGAGCTGGGACTCTTCCAGTCCTGTTGACCGTCTGAGCCAGAGGCTGCTAGCCCCAC
CACCAGAAGCTCGCCAGTGACCCGAAGCATGGGAACAGGAGACACCCCTGGCCTGGAGGTACCATCTAGCCCTCT
GCGGAAAGCCAAGCGAGCTCGCCTCTGCTCCTCCAGCAGTTCGGACACATCTTCCCGAAGCTTCTTTGATCCCAC
CTCTCAGCATAGAGACTGGTGCCTTGGGTGAATATCACACTTGGCAAAGAAAGCAGGGAGAATGGTGGAACTGA
ACCAGATGCCAGCGCCCCAGCAGAGCCAGGCTGGAAAGCAGTGCTGACCATCCTCTTGGCGCACAAACAGTCTAG
CCAGCCAGCTGAAACGGACTCCATGAGTCTCTCTGAGAAATCAAGGAAAGTATTCCGAATATTTCCGGCAGTGGGA
ATCTCTGTGCTCATGCTGAAGATACTCAGCGCCTTCCCTGGAGATAGCTGGAATGAGAGTGACTTTTTGAAAAAT
TAAGGCTGAGTTCCTTTCCGTGAGCTGACACTAAGTTTTCTGTTCTGGGTTAATCATAAGGAGCCCCCTGCCA
TAGCAAAGGCAGTGAGTGTCAACTATCTGCATCTGGCTGAGAGAGACCCGTTTCTTTTCAGGGATGTGGACAGGG
TAAGGGCAGCAAGCATGGTCTGTAAAGGAGTGTTGGGATTAACAGACTAGAAGGAAGACTAAGGACCTGACCAC
CCATTTACGATCTTCAATGTGGAGCAGTGTCTGAGGACTCTCTATCCTAGGACTATGACAGTGTGTATTAAT
AAAATATTTGCTAAGATTCTCA

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FIGURE 2414

GGCGCTGACGCCTGGCAGGGAGAAGGCGGCAGCACATGCTGGGCTCGGGGGCGATGGGCTTGTGCGCGGACCTGG
CGACGCTCTAGCCCCGAGCCGCGTATTCTGTGGCCGGGTCTCCCTGGGAACAGGGTGAAGGCCGAGAACCTCTGG
CCTCAGGAAGCGCATGCGCAACCGGTTCTCCGAAACATGGAGTCTGTAGGCAAGGTCTTACCTGAATCAGGATG

AGGGAGTGGTGGGTCCAGGTGGGGCTGCTGGCCGTGCCCTGCTTGCTGCGTACCTGCACATCCCACCCCTCAG
CTCTCCCTGCCCTTCACTCATGGAAGTCTTCAGGCAAGTTTTCTACTTACAAGGGACTGCGTATCTTCTACCAA
GACTCTGTGGGTGTGGTTGGAAGTCCAGAGATAGTTGTGCTTTTACACGGTTTTCCAACATCCAGCTACGACTGG
TACAAGATTTGGGAAGGTCTGACCTTGAGGTTTCATCGGGTGATTGCCCTTGATTTCCTAGGCTTTGGCTTCAGT
GACAAACCGAGACCACATCACTATTCCATATTTGAGCAGGCCAGCATCGTGGAAGCGCTTTTGCGGCATCTGGGG
CTCCAGAACCGCAGGATCAACCTTCTTTCTCATGACTATGGAGATATTGTTGCTCAGGAGCTTCTCTACAGGTAC
AAGCAGAATCGATCTGGTCGGCTTACCATAAAGAGTCTCTGCTGTCAAATGGAGGTATCTTCTGAGACTCAC
CGTCCACTCCTTCTCCAAAAGCTACTCAAAGATGGAGGTGTGCTGTCAACCATCCTCACACGACTGATGAACTTC
TTTGTATTCTCTCGAGGTCTCACCCAGTCTTTGGGCCGTATACTCGGCCCTCTGAGAGTGAGCTGTGGGACATG
TGGGCAGGGATCCGCAACAATGACGGGAACCTTAGTCAATTGACAGTCTCTTACAGTACATCAATCAGAGGAAGAAG
TTCAGAAGGCGCTGGGTGGGAGCTCTTGCCCTGTAACTATCCCCATTCATTTTATCTATGGGCCATTGGATCCT
GTAAATCCCTATCCAGAGTTTTTGGAGCTGTACAGGAAAACGCTGCCGCGGTCCACAGTGTGCGATTCTGGATGAC
CACATTAGCCACTATCCACAGCTAGAGGATCCCATGGGCTTCTTGAATGCATATATGGGCTTCATCAACTCCTTC
TGAGCTGGAAAGAGTAGCTTCCCTGTATTACCTCCCTACTCCCTTATGTGTTGTGTATTCCACTTAGGAAGAAA
TGCCCAAAGAGGTCTGGCCATCAAACATAATTCTCTCACAAAGTCCACTTTACTCAAATTGGTGAACAGTGTA
TAGGAAGAAGCCAGCAGGAGCTCTGACTAAGGTTGACATAATAGTCCACCTCCCATTACTTTGATATCTGATCAA
ATGTATAGACTTGGCTTTGTTTTTTGTGCTATTAGGAAATCTGTATGAGCATTACTATTCACTGATGCAGAAAGA
CGTCTTTTGCATAAAAGACTTTTTTTTAAACACTTTGGACTTCTCTGAAATATTTAGAAGTGCTAATTTCTGGCC
CACCCCAACAGGAATTCTATAGTAAGGAGGAGGAGAAGGGGGGCTCCTTCCCTCTCCTCGAATGACGTTATGGG
CACATGCCTTTTTAAAGTTCTTTAAGCAACACAGAGCTGAGTCCTCTTTGTCATACCTTTGGATTTAGTGTTTCA
TCAGCTGTTTTTAGTTATAAACATTTTGTAAAAATAGATATTGGTTTAAATGATACAGTATTTTAGGTATGATTT
AAGACTATGATTTACCTATACATTATATATTTTATAAAGATACTAAACCAGCATACCCTTACTCTGCCAGAGT
AGTGAAGCTAATTAAACACATTTGGTTTCTGAATAAATTGAACTAAATCCAACTATTTCTTAAATCACAGGAC
ATTAAGGACCAATAGCATCTGTGCCAGAGATGTACTGTTATTAGCTGGGAAGACCAATTCTAACAGCAAATAACA
GTCTGAGACTCCTCATACCTCAGTGGTTAGAAGCATGTCTCTCTTGAGCTACAGTAGAGGGGAAGGGATTGTGT
GTAGTCAAGTCACCATGCTGAATGTACACTGATTCCTTTATGATGACTGCTTAACTCCCCACTGCCTGTCCCAGA
GAGGCTTTCCAATGTAGCTCAGTAATTCCTGTTACTTTACAGACAGGAAAGTTCCAGAACTTTAAGAACAAACT
CTGAAAGACCTATGAGCAAATGGTGCTGAATACTTTTTTTTAAAGCCACATTTTATTGTCTTAGTCAAAGCAGG
ATTATTAAGTGATTATTTAAAAATTCGTTTTTTTAAATTAGCAACTTCAAGTATAACAACCTTTGAAACTGGAATAA
GTGTTTATTTTCTATTAATAAAAAATGAATTGTGAC

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FIGURE 2415

MREWWVQVGLLAVPLLAAYLHIPPQLSPALHSWKSSGKFFTYKGLRIFYQDSVGVVGSPEIVVLLHGFTSSYD
WYKIWEGLTLRFHRVIALDFLGFGFSDKPRPHHSIFEQASIVEALLRHLGLQNRINLLSHDYGDIVAQELLYR
YKQNRSGRLTIKSLCLSNGGIFPETHRPLLQKLLKDGGVLSPILTRLMNFFVFSGRLTPVFGPYTRPSESELWD
MWAGIRNNDGNLVIDSLLQYINQRKKFRRRWVGALASVTIPIHFIYGPLDPVNPYPEFLELYRKTLPSTVSILD
DHISHYPQLEDPMGFLNAYMGFINSF

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FIGURE 2416

TGCTTGTACCTAGAAGGGAGACGAGGAAACACACATGTAGCTGAGCAAACCTTAAACCAGTGCACCGCTGAAAACG
AGAGAAAAAGGATACAAACAGTCCAGAAACAATGTACTTTCCTAGCATCATAAGCTGAAGTCTGAAGCTCCACTG
ACCTGTAGAGAAGCTCCTGAGCAACAATATCTCCATAGTCATGAGAAAGAAGGTTGATCCTGCGGTTCTGGAGCC
CCAGATGCCGCAAAGCGCTTCCACGATGCTGGCCTGCTCAAATATGGAATAGTGATGTGGTCTCTGAGGAAAGG
AAAGCCACATACACAGGATGAAGTCATGAGGACAGCTCTCTCTGCCAGCCTGACCCCTCATAGTCTGCGTCTGCC
CCCACACCCCATCACCAGCCCCACATAGGTGCTGCTTACCGGTTTGTCACTGAAGCCAAAGCCTAAGAAATCAAG
GGCAATCACCCGATGAAACCTCAAGGTCAGACCTTCCCAAATCTACAAGAAAGAAACGATGATTTGGGCTTTCTG
CTCCTGCCCCCTCCCTTTCACCAGACCTACAGTTGCACAGGAGCTTACGCCCTATCTTGGCTTAACAGACTTCCAT
AAAGAGAAAACGCCATGAAACTACCACAGGTCCCACAGATGATCCTTGGAAAATGCTTTATTCCTGGTAATTA
ATCCCTGTTGAGGGAGGGTAACCTGGCAGTGATCCCTTCCAGAGTGCCAAGGAGTTGTTTATTCCTTCAGTAAA
TAAGGAACAGTTCAACATTTAATGTTTTTTTTTAAAAGCAATTCAAATGTGCAAGAGCCTTCTGGTGCTGACAACAA
AATCCTTGAGGTTTTTTTAAATTTTTTATTAATAAAAAAATTTTTTTTTTGAGACAGACTCTCGCTCTGTACCTAGGC
TGAAGTGCAAGTGGTGCAATCTCAGCTCACTGCAACCTCTGCCCTCCCGGTTCAAGCGATTCTCCTGCCTCAGCCT
CCCAAGTAGCTGGGATTACAGGCTTGTGCCACCATGCCTGGCCAAATTTTATACCTTTTAGTAGAGATGGGGTTTT
GCCATGTTGGCCTGGCTGGTCTCAAACCTCTGACCTCAGGTCACTCTCCACCTCAGCCTCCCAAAGTGCTAGGA
TTTGAGCCCCCGCGCCCGGCGGAGATTTTTTAAGACATAGTAGGACGTAGAAGTCTGACTTCATTACCTTGTACC
AGTCGTAGCTGGATGTTGGAAAACCGTGTAAGACACAACCTATCTCTGGACTTCCAACCACACCCACAGAGTCTA
GGAAGAAGGAAAGTACAATCAATTATGCCAAATCCCTATAAAAAATAACCTCGAAGATGTTAAAAATCTAAGTAATC
TGATACAAAGAACAAGCAACTGTGACCAAAATTGACATTAAAAATGACACAATTATTTGTAAGTAAAGCTTAACT
GCGTTAGGTGAGAACAGGCCTTTTCTCCTTTCAATCTGTATATTAACCAATTGTAAAAATCATGCTATGTGAAAA
TACTTGAAGGCACCTTGTTTACTTTCACCTAGGTGTTTTTAAACAGCATCTCCCCATTTCTCCTTTTGTCTGTGA
ATATGCAAATTTTTTCAGTGAAAAGTAAATTTTCAGTTAAAGCATATGATCACAACACATAAACTACAAATTCT
TTGTACTTTATCATGAATGGCCTCACAGAAATCTCTAAGATACAGCAACTATTCCCAAGGAACACCTTTAGCTT
ATGCTGTTTGCTCAGCACTTTTTATTTCAGCAGGAGACCCAATCTAACATCAAAAACATAATAAACTATTACAAA
ATCCTGTCAACTATAAAAAGGGCTTAATCAACATAAACATGAACCTTTTTTAATGCATATGACAATATGGAAGCAT
TCAGCATCATCTAAATTAGGTAAACATTTAGACAATATTAACCTTGCTAATAGTATGGGATTAGAACAGGTATAT
TCATATACTGCCAGTGACATGAAAATTTGGTAATAAGGTTTTCAAAAATAATTTAGAAGCAGTTAAAAATTGTAT
ATACTTTAGCCTAAGAGTTTTGTTCTTGAGAACTGTGCAAAATAAAATCATTCCATTTATACAAGTAGTATAGTT
TGAAAATGTAAGGAAAAATAAACTGTATGGACATGAAGCTTTTACTTCAACATTAGTTTTCTAAAACAGTAAAA
CTGGAAGTAACCCAAGCCAACATAATAAAAAATTGTATACTTACTTAATTGAATATAGCAAATGAGAGGAGGTCAG
GAGCAATAATGAAAAACGGTTTATGACAAACATTTTCGTTATTGCTCTTGACCCCGCTCAAAACAAATCATT
CCAATCTGTTTCTCAGTTTCTTCACCTATAAAATGAGGTTAATGGCACCTATCTCCAAATGCTGTTGTAAAGATT
AAACAATGAAGGCTGAAAACATAACTCAGTGCCTGGCATATGGTAATTACTTGATAAGTAGTGCTCATAATAATC
ATCATCACTAGCAAATTAATTTATATAATGGTATCAAGACTTAAATCACAGTTACACTACAAATAATCTACAGAA
AAAATGAAATCAGGGATGGTAAGGAGAGAGAACCAATGGTGGTTATATCTATTAATATTTTATATATTACCTGAC
AGTTGCTC

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FIGURE 2417

TTTCCAGCCCCGGCCCCGGACCCTGCAGCTGCAGAGATGTTGATGCCTAAGAAGAAGCTGGATTGCCATTTATGAA
CTCCTTTTTTAAGGAGGGAGTCATGGTGGCCAAGAAGGATGTCCACATGCCTAAGCACCCGGAGCTGGCAGACAAG
AATGTGCCCAACCTTCATGTATGAAGGCCATGCAGTCTCTCAAGTGCCGAGGCTACGTGAAAGAACACTTTGCC
TGGAGACATTTCTACTGGTACCTTACCAATGAGTGTATCCAGTATCTCCGTGATTACCTTCATCTGCCCCGGAG
ATTGTGCCTGCCACCCTACGCCGTAGCCGTCCAGAGACTGGCAGGCCTCGGCCTAAAGGTCTGTATATGAGGAGT
GCTGTGCTACCTGGTGGCGACAAGAAAGCCGAGGCTGGGGCTGGGTGAGCAACCGAATTCTAGTTTAGAGGCGGA
TTTGGTTGTGGACGTGGTCAGCCACCTCAGTAAAGCTGGAGAGGATTCTTTTGATTGAATAAATTTACAGCCAA
AAAA

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FIGURE 2418

CTCTTTCTGCTGCTCCCCAGCTCTCGGATACAGCCGACACCATGGGTTCGGAGACCTGAAAAGCCCCACCGGCC
TCCAGGTGCTCAACGATTACCTGGCGGACAAGAGCTACATCAAGGGGTATGGTGCCATCACAAGCAGATGTGGCA
GTATTTGAAGCCGTGTCCGGCCCCACCACCTGCCGACTTGTGTCATGCCCTACGTTGGTATAATCACATCAAGTCT
TACGAAAAGGAAAAGGCCGGCCTGCCAGGAGTGAAGAAAGCTTTGAGCAAGTATGGTCCTGCCGATGTGGAAGAC
ACTACAGGAAGTGGAGCTACAGACAGTAAAGATGATGATGACATTGATCTCTTTGGATCCGATTATGAGGAGGAA
AGTGAAGAAGCAAAAGAGGCTAAGGGAAGAACATCTTGACACAATATGAATCAAAGAAAGCCAATGATGAGACAGAT
ATGGCGAAATTAGAGGAGTGTGTCAGAAGCATTCAAGCAGACGGCTTAGTCTGGGGCTCATCTAAACTAGTTCCA
GTGGGATACGGAATTAAGAACTTCAAATACAGTGTGTAGTTGAAGATGATAAAGTTGGAACAGATATGCTGGAG
GAGCAGATCACTGCTTTTGAGGACTATGTGCAGTCCATGGATGTGGCTGCTTTCAACAAGATCTAAAAATCCATC
CTGGATCATG

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FIGURE 2419

MVPSQADVAVFEAVSGPPPADLCHALRWYNHIKSYEKEKAGLPGVKKALSKYGPADVEDTTGSGATDSKDDDDID
LFGSDYEEESSEAKRLREEHLAQYESKKANDETDMAKLEECVRSIQADGLVWGSSKLVPVGYGIKKLQIQCVVED
DKVGTDMLEEQITAFEDYVQSMDVAAFNKI

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FIGURE 2420

CTTTCTTTGCGGAATCACCATGGCGGCTGGGACCCTGTACACGTATCCTGAAAACCTGGAGGGCCTTCAAGGCTCT
CATCGCTGCTCAGTACAGCGGGCTCAGATCCGCGTGCTCTCCGCACCACCCACTTCCATTTTGGCCAAACCAA
CCGCACCTCTGAATTTCTTCGCAAATTTCTGCGGCAAGGTCCCAGCATTGAGGGTGATGATGGATTCTGTGT
GTTTGAGAGCAACGCCATTGCCTACTATGTGAGCAATGAGGAGCTGCGGGGAAGTACTCCAGAGGCAGCAGCCCA
GGTGGTGCASTGGGTGAGCTTTGCTGATTCCGATATAGTGCCCCAGCCAGTACCTGGGTGTTCCCCACCTTGGG
CATCATGCACCACAACAAACAGGCCACTGAGAATGCAAAGGAGGAAGTGAGGCGAATTCTGGGGCTGCTGGATGC
TTACTTGAAGACGAGGACTTTTCTGGTGGGCGAACGAGTGACATTGGCTGACATCACAGTTGTCTGCACCCCTGTT
GTGGCTCTATAAGCAGGTTCTAGAGCCTTCTTTCCGCCGGGCTTTCGCAATACCAACCGCTGGTTTCCTCACCTG
CATTAAACCAGCCCCAGTTCCGGGCTGTCTTGGGGGAACGAAACTGTGTGAGAAGATGGCCCAGTTTGTATGCTAA
AAAGTTTGCAGAGACCCAGCCTAAAAAGGACACACCACGGAAAGAGAAGGGTTACCGGGAAGAGAAGCAGAAGCC
CCAGGCTGAGCGGAAGGAGGAGAAAAAGGCGGCTGCCCTGCTCCTGAGGAGGAGATGGATGAATGTGAGCAGGC
GCTGGCTGCTGAGCCCAAGGCCAAGGACCCCTTCGCTCACCTGCCCAAGAGTACCTTTGTGTTGGATGAATTTAA
GCGCAAGTACTCCAATGAGGACACACTCTCTGTGGCACTGCCATATTTCTGGGAGCACTTTGATAAGGACGGCTG
GTCCCTGTGGTACTCAGAGTATCGCTTCCCTGAAGAACTCACTCAGACCTTCATGAGCTGCAATCTCATCACTGG
AATGTTCCAGCGACTGGACAAGCTGAGGAAGAATGCCTTCGCCAGTGTCATCCTTTTGGGAACCAACAATAGCAG
CTCCATTTCTGGAGTCTGGGTCTTCCGAGGCCAGGAGCTTGCCTTTCCGCTGAGTCCAGATTGGCAGGTGGACTA
CGAGTCATACACATGGCGGAAACTGGATCCTGGCAGAGAGGAGACCCAGACGCTGGTTCGAGAGTACTTTTCCTG
GGAGGGGGCCTTCCAGCATGTGGGCAAAGCCTTCAATCACGGCAAGATCTTCAAGTGAACATCTCTTGCCATCAC
CTAGCTGCCTGCACCTGCCCTTCAGGGAGATGGGGGTCAATAAGGAAACTGAACATTG

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FIGURE 2421

MAAGTLYTYPENWRAFKALIAAQYSGAQIRVLSAPPHFHFQGQTNRTSEFLRKFPAGKVPAPFEGDDGFCVFESNAI
AAYVSNEELRGSTPEAAAQVVQWVSFADSDIVPPASTWVFPTLGIMHHNKQATENAKEEVRRILGLLDAYLKTRT
FLVGERVTLADITVVCTLLWLYKQVLEPSFRRFRNTNRWFLTCINQPQFRAVLGELKLCEKMAQFDAKKFAETQ
PKKDTPRKEKGSREEKQKPQAEERKEEKAAAPAPEEEMDECEQALAAEPKAKDPFAHLPKSTFVLDEFKRKYSNE
DTLSVALPYFWEHFDKDGWSLWYSEYRFPEELTQTFMCSNLTGMFQRLDKLRKNAFASVILFGTNNSSSISGVW
VFRGQELAFPLSPDWQVDYESYTWKLDPGREETQTLVREYFSWEGAFQHVKGAFNHGKIFK

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FIGURE 2422

ATCACCATGGCGGCTGGGACCCTGTACACGTATCCTGAAAAC TGGAGGGCCTTCAAGGCTCTCATCGCTGCTCAG
TACAGCGGGGCTCAGATCCGCGTGCTCTCCGCACCACCCACTTCCATTTTGGCCAAACCAACCGCACCTCTGAA
TTTCTTCGCAAATTTCTGCGGCAAGGTCCCAGCATTTGAGGGTGATGATGGATTCTGTGTGTTTGAGAGCAAC
GCCATTGCCTACTATGTGAGCAATGAGGAGCTGCGGGGAAGTACTCCAGAGGCAGCAGCCCAGGTGGTGCAGTGG
GTGAGCTTTGCTGATTCCGATATAGTGCCCCCAGCCAGTACCTGGGTGTTAGCCCAAGGCCAAGGACCCCTTCGC
TCACCTGCCCCAAGAGTACCTTTGTGTTGGATGAATTTAAGCGCAAGTACTCCAATGAGGACACACTCTCTGTGGC
ACTGCCATATTTCTGGGAGCACTTTGATAAGGACGGCTGGTCCCTGTGGTACTCAGAGTATCGCTTCCCTGAAGA
ACTCACTCAGACCTTCATGAGCTGCAATCTCATCACTGGAATGTTCCAGCGACTGGACAAGCTGAGGAAGAATGC
CTTCGCCAGTGTATCCTTTT

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FIGURE 2423

GAAGGCCGCACCGTACTGGGCGGGGGTCTGGGGAGCGCAGCAGCCATGGCAAGCCGTCTCCTGCTCAACAACGGC
GCCAAGATGCCCATCCTGGGGTTGGGTACCTGGAAGTCCCCTCCAGGGCAGGTGACTGAGGCCGTGAAGGTGGCC
ATTGACGTCGGGTACCGCCACATCGACTGTGCCCATGTGTACCAGAATGAGAATGAGGTGGGGGTGGCCATTGAG
GAGAAGCTCAGGGAGCAGGTGGTGAAGCGTGAGGAGCTCTTCATCGTCAGCAAGCTGTGGTGCACGTACCATGAG
AAGGGCCTGGTGAAAGGAGCCTGCCAGAAGACACTCAGCGACCTGAAGCTGGACTACCTGGACCTCTACCTTATT
CACTGGCCGACTGGCTTTAAGCCTGGGAAGGAATTTTTCCCATTTGGATGAGTCGGGCAATGTGGTTCCTCAGTGAC
ACCAACATTCTGGACACGTGGGCGGCCATGGAAGAGCTGGTGGATGAAGGGCTGGTGAAAGCTATTGGCATCTCC
AACTTCAACCATCTCCAGGTGGAGATGATCTTAAACAAACCTGGCTTGAAGTATAAGCCTGCAGTTAACCAGATT
GAGTGCCACCCATATCTCACTCAGGAGAAGTTAATCCAGTACTGCCAGTCCAAAGGCATCGTGGTGACCGCCTAC
AGCCCCCTCGGCTCTCCTGACAGGCCCTGGGCCAAGCCGAGGACCCTTCTCTCCTGGAGGATCCCAGGATCAAG
GCGATCGCAGCCAAGCACATAAACTACAGCCCAGGTCCGTGATCCGGTTCCCATGCAGAGGAACCTGGTGGTG
ATCCCCAAGTCTGTGACACCAGAACGCATTGCTGAGAACTTTAAGGTCTTTGACTTTGAACGAGCAGCCAGGAT
ATGACCACCTTACTCAGCTACAACAGGAACCTGGAGGGTCTGTGCCTTGTGAGCTGTACCTCCCACAAGGATTAC
CCCTTCCATGAAGAGTTTTGAAGCTGTGGTTGCCTGCTCGTCCCCAAGTGACCTATACCTGTGTTTCTTGCCCTCA
TTTTTTTCCTTGCAATGTAGTATGGCCTGTGTCACTCAGCAGTGGGACAGCAACCTGTAGAGTGGCCAGCGAGG
GCGTGTCTAGCTTGATGTTGGATCTCAAGAGCCCTGTGAGTAGAGTAGAAGTCTCTCCAGTTTGCTTTGCCCTT
CTTTCTACCCTGCTGGGGAAAGTACAACCTGAATACCCTTTTCTGACCAAAGAGAAGCAAAATCTACCAGGTCAA
AATAGTGCCACTAACGGTTGAGTTTTGACTGCTTGGAACCTGGAATCCTTTCAGCAAGACTTCTCTTGCCCTCAAA
TAAAAAGTGCTTTTTGTG

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FIGURE 2424

MASRLLLNNGAKMPIILGLGTWKSPPGQVTEAVKVAIDVGYRHHIDCAHVYQNEVEVGVAIQEKLREQVVKREELFI
VSKLWCTYHEKGLVKGACQKTLSDLKLDYLDLYLIHWPTGFKPGKEFFPLDESGNVVPSDTNILD TWAAMEELVD
EGLVKAIGISNFNHLQVEMILNKPGLKYKPAVNQIECHPYLTQEKL IQYCQSKGIVVTAYSPLGSPDRPWAKPED
PSLLEDPRIKAIAAKHNKTTAQVLIRFPMQRNLVVIPKSVTPERIAENFKVDFELSSQDMTLLSYNRNWRVCA
LLSCTSHKDYPFHEEF

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FIGURE 2425

GGCACGAGGCCTGAGCTCAGGAGTTTGAAGACCAGCCTGTCTCTACTAACAATATAAAAAATTAGCTGGGAGTCACG
GTGGGCGCCTGTAATCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATTGCTTGAACCCAGGAGACAGAGGTTGTA
GTGAGCTGAGATCGCACCCTGCACTCTAGCCTTGGCAACAGTGCAAGACTGTCTCAAAAACAGCAACAGAGAGC
AGGACGTGAGACTTCTACCTGCTCACTCAGAATCATTCTGCACCAACCATGGCCACGTTTGTGGAGCTCAGTAC
CAAAGCCAAGATGCCCATTTGTGGGCCTGGGCACTTGGAAGTCTCCTCTTGGCAAAGTGAAAGAAGCAGTGAAGGT
GGCCATTGATGCAGGATATCGGCACATTGACTGTGCCTATGTCTATCAGAATGAACATGAAGTGGGGGAAGCCAT
CCAAGAGAAGATCCAAGAGAAGGCTGTGAAGCGGGAGGACCTGTTTCATCGTCAGCAAGTTGTGGCCCCACTTTCTT
TGAGAGACCCCTTGTGAGGAAAGCCTTTGAGAAGACCCTCAAGGACCTGAAGCTGAGCTATCTGGACGTCTATCT
TATTCAGTGGCCACAGGGATTCAAGTCTGGGGATGACCTTTTCCCCAAAGATGATAAAGGTAATGCCATCGGTGG
AAAAGCAACGTTCTTGGATGCCTGGGAGGCCATGGAGGAGCTGGTGGATGAGGGGCTGGTGAAAGCCCTTGGGGT
CTCCAATTTTCAGCCACTTCCAGATCGAGAAGCTCTTGAACAAACCTGGACTGAAATATAAACAGTGACTAACCA
GGTTGAGTGTCAACCATACCTCACACAGGAGAACTGATCCAGTACTGCCACTCCAAGGGCATCACCGTTACGGC
CTACAGCCCCCTGGGCTCTCCGGATAGACCTTGGGCCAAGCCAGAAGACCCTTCCCTGCTGGAGGATCCCAAGAT
TAAGGAGATTGCTGCAAGCACAAAAAACCAGCCAGGTTCTGATCCGTTTCCATATCCAGAGGAATGTGAT
TGTCATCCCCAAGTCTGTGACACCAGCACGCATTGTTGAGAACATTCAGGTCTTTGACTTTAAATTGAGTGATGA
GGAGATGGCAACCATACTCAGCTTCAACAGAACTGGAGGGCCTGTAACGTGTTGCAATCCTCTCATTGGAAGA
CTATCCCTTCGATGCAGAATATTGAGGTTGAATCTCCTGGTGAGATTATACAGGAGATTCTCTTTCTTCGCTGAA
GTGTGACTACCTCCACTCATGTCCCATTTTAGCCAAGCTTATTTAAGATCACAGTGAACCTTAGTCCTGTTATAGA
CGAGAATCGAGGTGCTGTTTTAGACATTTATTTCTGTATGTTCAACTAGGATCAGAATATCACAGAAAAGCATGG
CTTGAATAAGGAAATGACAATTTTTTCCACTTATCTGATCAGAACAAATGTTTATTAAGCATCAGAACTCTGCC
AACACTGAGGATGTAAAGATCAATAAAAAAATAATAATCATAAAAA

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FIGURE 2426

MATFVELSTKAKMPIVGLGTWKSPLGKVKEAVKVAIDAGYRHIDCAYVYQNEHEVGEAIQEKEKAVKREDLFI
VSKLWPTFFERPLVRKAFKTLKDLKLSYLDVYLIHWPQGFKSGDDLFPKDDKGNAIGGKATFLDAWEAMEELVD
EGLVKALGVSNFSHFQIEKLLNKPGLKYKPVNTQVECHPYLTQEKLQYCHSKGITVTAYSPLGSPDRPWAKPED
PSLLEDPKIKEIAAKHKKTAQVLIRFHIQRNVIVIPKSVTPARIVENIQVDFKLSDEEMATILSFNRNWRACN
VLQSSHLEDYPFDAEY

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FIGURE 2427

CAGAGTTTGGGCGCCAGGCGAGACGGCAGGGCTTAAAGTTCCGGGAATCAAAGATCAACTCCCCTGAGGACAAA
TGGACCTGTAATTCGGGTGTGACGAGAGAACGAGATTTACCTTCCTGAATTAAAAACAGGTCATTAAGCTTGG
GCCCTGACTTTTCTTTGTGAGAAGGTACAGAGATGGAAACCTTACAATCCGAGACTAAAACGAGGGTCCCTCCCT
CATGGCTGACAGCCCAGGTGGCTACAAAGAATGTGGCACCAATGAAGGCCCCCAAGAGGATGAGAATGGCAGCAG
TGCCAGTGGCAGCAGCAAGACTCCCTGCGACAAGGACTGTGTACTGCATGAATGAGGCTGAGATAGTTGATGTTG
CTCTGGGAATCCTGATTGAGAGCCGAAACAGGAAAAGGCCTGCGAGCAGCCGGCCCTGGCGGGGGCTGATAACC
CAGAGCACTCCCCTCCCTGCTCCGTGTGCGCTCACACAAGTTCTGGGAGCAGCAGTGAGGAAGAGGACAGTGGGA
AACAGGCACTGGCTCCAGGCCTCAGCCCTTCCAGAGGCCGGGGGGTTCAGCTCTGCCTGTAGCAGGAGCCCTG
AGGAGGAGGAGGAAGAGGATGTGCTGAAATACGTCCGGGAGATCTTTTTCAGCTTAGGGCATAAACTGTGCACTGA
ACTGTCTGCCGAGAGCAGCTGGAGGACAGCTGAGCTTCCACTGGTGCTGCTGGGCCGCCCGCCTGTGGGAATGGG
GCTCTCTGTGCTCCTACCTTTGTGCCTTCTTGGGCCTGGCAGATTCACCTCAGGCCAGAAGCCCCCTGGACACTCC
GGGCCTTGGGGCTGCCGTTCTGAGTGTGCGGAAGGCAGGACTCAAAATGAGATCCCATTGACTCCCTCTGTATG
TACTGTGCCCTCTCCTGGCTCTTGAGGCTCTGGAGTCCCAATTGTCTGTGTTAGTCAGTGACCAGGTTCAGGGA
AAATGATGTGATGTGGTGGTCCAACTTACTGGAACCAAAGAGACAGTACTTTGCAAAGAAAAGGATCACTGCCAG
GTGCACTGGAATTGCTACAGTTTAGTCCGCATGATCTCTCCTGAAGGAGGAAGCCTGTTTCAAAAATAGTTTCCA
TCATGAGTCTATCAATGAGCTCCCACCTCTCCAGCCAGCCTAGAAAGCAAACGAGCTGCCCCACAGTTCTCTGCCC
TGTCTGGGAGGTTGAGGCCACAGTGTATAGACTGGTAAGCCAGACAGGCCTCCTCCCGCAAGCTGCTACCTTGCT
TTCACCTGTACCTTGGTCCCCGGGCAGCTAGCTATAAAGCAAGAGGGACAGGAGCCCAGAAGAGACACTGAGGAC
AAGAGATCACACCAGAGTACATGTCTCTGCCTCTGTTTTCAGTGTGGCTTTGGACAGGAATATATGAATAAATCA
CTGCCATACAGGTTTTCCAATACACAAGTGCTAGAAAATACACACAATTCCCCAATGAAAAAAAAAAAAAAAAA

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FIGURE 2428

MKAPKMRMAAVPVAAARLPATRTVYCMNEAEIVDVALGILIESRKQEKACEQPALAGADNPEHSPPCSVSPHTS
SGSSSEEEEDSGKQALAPGLSPSQRPGGSSSACSRSPEEEEEDVLKYVREIFFS

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FIGURE 2429

GAGGTAGGCTCGGACCGGCCCGCGGAGCTGCTGCAGTCCTTCGCGCCCTCCTCGCCCTCCCCACCGACATCATGC
TCCAGTTCCTGATACCAAACCTGGCTAAAAAAGCTGAAGAAATTAAAAAGGACTTGGATGCCAAGAAGAAACCCC
CTAGTGCATGAGACTGCCTCCAGCACTGCCTTCAGGATATACTGATTCTACTGCTCTTGAGGGCCTCGTTTTACTA
TCTGAACCAAAAAGCTTTTTGTTTTCTCTCCAGCCTCAGCACTTCTCTTCTTTGCTAGACCCTGTGTTTTTGTCTT
TAAAGCAAGCAAAATGGGGCCCCAATTTGAGAACTACCCGACATTTCCAACATACTCACCTCTTCCCATAATCCC
TTTCCAAGTGCATGGGAGGTTCTAAGACTGGAATTATGGTGCTAGATTAGTAAACATGACTTTTAATGAGTAGTG
TCTTCTTTATCGTTTGCGATTTTTACTACCTTTTTTCAAAAAGAAAAATTGATGAGTTTTGTATAGCTGGTCAGAT
ACAAATAATAGTGACTTCACAGTTTAGTAATTATAATGGGTACTTGTAAACATTTGGTACTAAATTATGTTGCT
GCAAAGTAATTAAAATTAGTATCTAGAGCTAGTTTCTGGTGAATTATTCATTTATTTTGTACTGTTGTTAGGCAG
CTCTGTAGTTGCTAATTTAACCAATAAGTCAATTTGCTATTTCATGAAGAAACGATTCTGAGAATCCTGTCAGGAA
TTGGGGAATGAAAAAATACACAAAATAATGGTCTTTGTGCCAGTAGAGTTTCATAGTCTATTTAGTGTGCATGTTT
TTCCTTAATGATGTATTTGATCTGACTTTTTTTCCTTCTCAAAAAGAAATCATACTTGGGATTACAGGTACATTTGAT
GTTATATGATGGATAAGTGAAGTGTAAAAAGGATTTTAAAGGAGATTTTATACCTTTTACATTAAAAAAGGTATTTATATTA
TTACTTTGTAGTGATTGTCTTAAGAAAAAATATAGCCCAATGTATAGTAAATCAGCAGCTCAAGAAGAATTTT
TGCTTCTCTTTGTAGTTGATGCTTTGTTTTTTCCTGCAGTCAGAAATTCCTTGTATTTGTCAAATGTATAATCAG
CTTGATTGTTTTTAAATTAAAAAAATTTGAATAATTAACTTTTGCCATGGGACAAGATACAAAAGTAATTTCA
TATAAAGGGCCTCTCCACCCCTGTCTCTGGCTCCTGGCTCCTGTTTGACAAGTTACTGTTACCACTTCGCCTT
ATACTTTTGAGAAAGAGTCTGTGCCATAACAAACACGTGTAACACAAATAGTAACATACATGGAGGTCTAGCCC
TCACCTTTTTTTTTCTTTTTTTCTTTTTTAATGGAGATCATTCTATACCAGCATGTAAGTAGCAAGGAACCTCA
TTCTTTTTTTGGCTGCCATAAAATTTTTTTGAATAGATATAACATAATTGATTTAATCTGCTACTGGTGAATGCTT
AGGTTGTTCTTTTGCTATTACAGTGATAACTTCAATCCTAATGTTATTAAGCATATCGATTTCAGGGTATAGCTAT
AAGATGAAGTCCATAAAAGTATAATTTAGACTAAATACAAATACCCATTTGCTAGCTGTTTTGTTTCAGAGGACT
TGTTGAGCAGCTTCACTAATAATGCCATTTTTGAAGACATGGCAGGTTCAAGATCAATAAACTGGAAGAATTGTT
CAGAGCATCTTTTTTCAGACAGTGATGACATTGATTCTGTATATGATAAAGTGATTCTGCTTCTCTTTGACAAC
TGCACTCTCTCCTACATGGAAGTAAGTTTTATTCCTGTCAATGTTGTCTTTGTGTGTGACAGATTAGGATTAAATT
ATGGTTTGACTTTTCTAGCAGCGTGATCATGGGCAAGTGGCTTATTTTTTTTTTTTTTTTGGAGACAGAGTCTC
ACTCTGCTGCCAGGCTGGAGTGCACTGGCACAGTCTTGGCTCACTGCAACTCCTGCCTCCCGGTCCAAGTGATT
CTCGTGCTGCAGCTTCTCAAGTAGCTGGCATCACCAACACCTGGCTAATTTTTGTATTTTGTAGTAACGACGAG
GTTTCACCATGTTGGCAAAGCTGGTCTCAAATTCCTGGCCTCAAGTGATCTGCCCACTTCAGCCTCCCAAAGTGT
TGGGATTACAGGCGTGAGCCACTGCGCCCGGCTTTTTTAACTTTTAGATTCAATTAATAGGTAAATTGCATGTC
ACGGGTTGTAGCTTATCTTTTCAGAACTCTTGCAATTATCTGTAGACGTGGACGTAAATATCCACCTCATAGGG
TTTTCATAAAAAATAATTGAGATAATGTATGTAATGTTTCACAGTGCTTTGCAGACTATCTAATAAATAGTAGCT
ATTAGTACAAA

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FIGURE 2430

CGCGGAGGAGAAGAGGAAGAGGAAGTTGGGGGAGGGTCCTAGCGGGGAGTGAACCGGAAGTGTAAGGTTCTGC
CTCTCCTCGGCCAGGCGGAACCTCTCTGCTGGGCCCGGTGGCCGCAAAAGAACTTTCTTTCTCCCGCCCGAACGG
TCGCCGCGGCCAACTGCCTCGCCCGCCTGGCAGCCTAACCTCCTTCTCTTCTCTCTCTCTCCGGCTTCGCGCGG
CCCTGCCTCCCTCTCGCCCGGCGGCATCCGCTTGCTGCTGCCACCGCCTCCTCATCTTCTGCCCGGCCAACCGGC
CTGCCCCGCTGCAGT**GATG**TGCGACAAGGAGTTCATGTGGGCCCTGAAAAACGGAGACTTGGATGAGGTGAAAGA
CTATGTGGCCAAGGGAGAAGATGTCAACCGGACACTAGAAGGTGGAAGGAAACCTCTTCATTATGCAGCAGATTG
TGGGCAGCTTGAAATCCTGGAATTTCTGCTGCTGAAAGGAGCAGATATTAATGCTCCAGATAAACATCATATTAC
TCCTCTTCTGTCTGCTGTCTATGAGGGTCATGTTTCCCTGTGTGAAATTGCTTCTGTCAAAGGGTGCTGATAAGAC
TGTGAAAGGCCCAGATGGACTGACCGCCTTTGAAGCCACTGACAACCGGCAATCAAAGCTCTTCTCCAG**TGATG**
GATGGATGGACTGATAACTCCGGAAGAATGACTCTCCTGTGGCCTCACACTGCTGCCTGTCTGTCTGTCACTCTC
TATCTGCCAGCTTCTTCAGCTAAATACCTTTAAGAGGGGTGAGGGGAGAGAGAAATTCATAACAAATCCGACTACC
AGAAAAAATAATTTGTTTTGGAGGAGGGGCAAAAGGAACCATGATCAGGCTTTTACTGGGATTCTGATCAAGTA
AGCCTCTTCCCTTTCTAATAAAATATACACCTTATACCCAAGGGAGAGCAAAAGACAAATACACAGTAACATTT
GACCTTTTCAGCTCCCTAGCTAATTTATTAGATTGTGTTGAAGGTCTGATTCTACAAAGGCCAACTCTACATATT
TGGTAGCCCTAACTGTCTGAGCAGTAGTGGCTGCTGTGATGTAAACTTAGGGTGCTGAGATAAGCAATTAGCTCT
AGCCTTCTGCCTTAAGAATGCACTCTACTGGGGATTTCTGGCATAGTTAAGAGCGCTGCCTATAAGGTTGGTGA
CCAAATCTTTCCTCGGTGACTTTAAGCTTTATGTGAAAGCTTAGTTAAGGTGAGGAGGGGCACACTCCTAAATTG
CTGGATGACTGAACCTTTGGATTTTCTCTCCCTTTTCATGGAATTCATGTCTCTTTAGATAAACTGACTAGTT
TTATTTATAAAATCTTAAGTTTTGGAAGTCTAAAGGAGAAACCATTCAGTATGCATATTTTTTCTCTCTAGTA
TTCATACATTTATATAGCATTGAAACACTTTCAAACCTCTGCTGGTAGTAAAGGGGATTTAAAAATAGAATCAT
AGCCATAAGCCTGTTAGTATCATATGAAGAGAGAACAGTTATCTTAGTACCTATGGATTTTCTTTATTTGCTGTT
TGAATGGATTGACCTTGGTTATGTGTTGAGAATTAAGGAACATTCTTTGAAATGCCTCTCTCAGACCCATCTTGG
AGGCTGATTACTTACTGCACCAAAGCTATCACTGGGGTGAGATTTACTGTTTGGACAAATTTAGCCCCATCCCTT
CAAAAATACACTTGTAACCAGGTTTCCCAGAGTTGTTGATAGGCTTCTGCTGAACATATGCCAACCCACCTGCAT
AATATATTTTTGTTGCTTTTATAAATCATGCATTACATAAAGTGTGACAACTTCAAATGTATTCTCTGTTCTTG
GAATACAGTGCCCTAAATGGTGTTCTTATGACCTGCAGAAAATATTTACACATAAATAAGCAATTGCAGTGTTT
TGCATGCAAAATATAAAAAATTTAAATTGTCCTGATTCTATTTTGTAATGGAGAAACAATCATATCTTTCTAAG
CGGTAATGGAGGAAGACTAGTGCTTTGTGCATTTTGATATATTTGAGTTCATTTTTTCCACAATGTCATACTTTT
GACGCAGTTGGGTTTCTCATAAGTATCCTAGTTCATGTACATCCGAATGCTAAATAATACTGTGTTTTAAGTTTT
GTGTTGCAAGAACAAATGGAATAAACTTGAATTGTGCT

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FIGURE 2431

MCDKEFMWALKNGDLDEVKDYVAKGEDVNRRTLEGGRKPLHYAADCGQLEILEFILLKGDINAPDKHHITPLLSA
VYEGHVSCVKLLLSKGADKTVKGPDGLTAFEATDNQAIAKALLQ

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FIGURE 2432

ATGAGGCGGTTTTTCAGTAGTACAGAGGGTACTTTGTCATATTAGACCTTTTCTGGCTCTTTTAACAAGGACGCTG
TTGCTTATTCCTAATAACAATGTCGTTCTCTGGCAGATTTCATAGTCCACCAGTCCAGCTCTGGCCCAAGATCTCCT
CTCACCATGATCCCAAGTTATTCTTTCCGGATATCATTAGGAAAGGACAGCGAATCATCCCTTTTCATCCTCTTC
CCATATGCCAACCCCTCACTCCCTCTTTTCTTATTTGCAATCAGAGAGGGAAGAATGCAGATCTGCCAAGTGCGT
TATAAATACTGTGAAACAAAAGGGACGCTCTGGGGCAGCGCAGGAGGGGTACAGTCCTACAAGGTGTCCACCTCT
GGCCCTGGGCCTTCAGCAGCCGCTCCTGCACGAGTGGGCCCTGTGCCCGCATGAGCTCCTCGAGCTTCTCCCGA
GTGGACAGCAGCAGCTTTCGGGGTGGCCTGGGCAGCGGCTATGAGGTGAACCCCAACATCCAGGCCGTGCGCATC
CAGGGGAAGGAGCAGATCAAGACCCTCAACAAGAAGTTTGCTCCTTCATAGACAAGGTACGGTTCCTGGAGCAG
CAGAACAAGATGCTGGAGACCAAGTGGAGCCTCCTGCAGCAGCAGACGACTCGGAGCAACATGGACAACATG
TTCGAGAGCTACATCAACAACCTTAGGCGGCAGCTGAAGCACTCTTCTTTTAAAAGTTTCTGA

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FIGURE 2433

CTCTTTCCCATCTTGCAAGATGGCGGGTGAAAAAGTTGAGAAGCCAGATACTAAAGAGAAGAAACCTGAAGCCAA
GAAGGCTGATGCTGGTGGCAAGGTGAAAAAGGGTAACCTCAAGGCTAAAAAGCCCAAGAAGGGGAAGCCCCATTG
CAGCCGCAACCCTGTCATTGTCAGAGGAATTGGCAGGTATTCCCGATCTGCTATGTATTCCAGAAAGGCCATGTA
CAAGAGGAAGTACTCAGCCGCTAAATCCAAGGTTGAAAAGAAAAAGAAGGAGAAGGTTCTTGCAACTGTTACAAA
ACCAAGTTGGTGGTGACAAGAACGGCAGTACCCGGGTGGTTAAACTTCGCAAAATGCCTAGATATTATCCTACTGA
AGATGTGCCCTCGAAAGCTGTTGAGCCACAGCAAAAAACCCTTCAGTCAGCACGTGAGAAAACTGCGAGCCAGCAT
TACCCCCGGGACCATTCTGATCATCCTCACTGGACGCCACAGGGGCAAGAGGGTGGTTTTCTGAAGCAGCTGGC
TAGTGGCTTGTTACTTGTGACTGGACCTCTGGTCCTCAATCGAGTTCTCTACGAAGAACACACCAGAAATTTGT
CATTGCCACCTCAACCAAAATCGATATCAGCAATGTAAAAATCCCAAAACATCTTACTGATGCTTACTTCAAGAA
GAAGAAGCTGCGGAAGCCAGACACCAGGAAGGTGAGATCTTCGACACAGAAAAAGAGAAATATGAGATTACGGA
GCAGTGCAAGATTGAGCAGAAAGCTGTGGACTCACAAATTTTACCAAAAAATCAAAGCTATTCTCAGCTCCAGGG
CTACCTGTGATCTGTGGTTGCCCTGACGAATGGAATTTATCCTCACAAATTGGTGTCTAAATGTCTTAAGAACT
TAATTAAATAGTTGACTAC

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FIGURE 2434

CAGGGCCCCCTGAGATCATCCTTGGTTTACCATTTTGTGAGGCAATTGACATGTGGTCCCTGGGCTGTGTTATTGC
AGAATTGTTCCCTGGGTGGCCGTTATATCCAGGAGCTTCGGAGTATGATCAGATTTCGGTATATTTTCAAAACACA
GGGTTTGCCTGCTGAATATTTATTAAGCGCCGGGACAAAGACAACTAGGTTTTTCAACCGTGACACGGACTCACC
ATATCCTTTGTGGAGACTGAAGACACCAGATGACCATGAAGCAGAGACAGGGATTAAGTCAAAAAGAAGCAAGAAA
GTACATTTTCAACTGTTTAGATGATATGGCCCAGGTGAACATGACGACAGATTGGAAGGGAGCGACATGTTGGT
AGAAAAGGCTGACCGGCGGGAGTTCATTGACCTGTTGAAGAAGATGCTGACCATTGATGCTGACAAGAGAATCAC
TCCAATCGAAACCCTGAACCATCCCTTTGTACCATGACACACTTACTCGATTTTCCCCACAGCACACACGTCAA
ATCATGTTTCCAGAACATGGAGATCTGCAAGCGTCGGGTGAATATGTATGACACGGTGAACCAGAGCAAAAACCCC
TTTCATCACGCACGTGGCCCCCAGCACGTCCACCAACCTGACCATGACCTTTAACAACCCAGCTGACCACTGTCCA
CAACCAGGCTCCCTCCTCTACCAAGTGCCACTATTTCTTAGCCAAATCCCGAAGTCTCCATACTAAACTACCCATC
TACACTCTACCAAGCCCTCAGCGGCATCCATGGCTGCAGTGGCCAGCGGAGCATGCCCCTGACAGACAGGAACAGC
CCAGATTTGTGCCCGGCTGACCCGTTCCAGCAAGCTCTCATCGTGTGTCCCCCGGCTTCCAAGGCTTGCAGGC
CTCTCCCTCTAAGCACGCTGGCTACTCGGTGCGAATGGAAAATGCAGTTCCCATCGTCACTCAAGCCCCAGGAGC
TCAGCCTCTTCAGATCCAACCAGGTCTGCTTGCCAGCAGGCTTGGCCAAGTGGGACCCAGCAGATCCTGCTTCC
CCCAGCATGGCAGCAACTGACTGGAGTGGCCACCCACACATCAGTGCAGCATGCCACCGTGATTCCCAGACCAT
GGCAGGCACCCAGCAGCTGGCGGACTGGAGAAATACGCATGCTCACGGAAAGCCATTATAATCCCATCATGCAGCA
GCCTGCACTATTGACCGGTCTGTGACCCCTCCAGCAGCACAGCCCTTAAATGTGGGTGTGGCCCACGTGATGCG
GCAGCAGCCAACCAGCACCACCTCCTCCCGAAGAGTAAGCAGCACCAGTCACTGTGTGAGAAATGTCTCCACCTG
TGAGGTGTCTCCTCTCAGGCCATCAGCTCCCCACAGCGATCCAAGCGTGTCAAGGAGAACACACCTCCCCGCTG
TGCCATGGTGCACAGTAGCCCGGCTGCAGCACCTCGGTACCTGTGGGTGGGGCGACGTGGCCTCCAGCACCAC
CCGGGAACGGCAGCGGCAGACAATTGTCAATCCCGACACTCCAGCCCCACGGTCAGCGTCACTACCATCAGCAG
TGACACGGACGAGGAGGAGGAACAGAAACACGCCCCCACCAGCACTGTCTCCAAGCAAAGAAAAAACGTCACTAG
CTGTGTACAGTCCACGACTCCCCCTACTCCGACTCCTCCAGCAACACCAGCCCCCTACTCCGTGCAGCAGCGTGC
TGGGCACAACAATGCCAATGCCCTTTGACACCAAGGGGAGCCTGGAGAATCACTGCACGGGGAACCCCCGAACCAT
CATCGTGCCACCCCTGAAAACCCAGGCCAGCGAAGTATTGGTGGAGTGTGATAGCCTGGTGCCAGTCAACACCAG
TCACCACTCGTCTCTCTACAAGTCCAAGTCTCCAGCAACGTGACCTCCACCAGCGGTCACTCTTCAGGGAGCTC
ATCTGGAGCCATCACCTACCGGCAGCAGCGCCGGGCCCCCACTTCCAGCAGCAGCAGCCACTCAATCTCAGCCA
GGCTCAGCAGCACATCACCACGGACCGCACTGGGAGCCACCGAAGGCAGCAGGCCTACATCACTCCCACCATGGC
CCAGGCTCCGTACTCCTTCCCGCACAAACAGCCCCAGCCACGGCACTGTGCACCCGCATCTGGCTGCAGCCGCTGC
CGTGCCCACTCCCCACCCAGCCCCACCTCTACACCTACACTGCGCCGGCGGCCCTGGGCTCCACCGGCACCGT
GGCCACCTGGTGGCTCGCAAGGCTCTGCGCGCCACACCGTGACGACACTGCCTACCCAGCCAGCATCGTCCA
CCAGGTCCCCGTGAGCATGGGCCCCCGGCTCCTGCCCTCGCCACCATCCACCCGAGTCAGTATCCAGCCCAATT
TGCCCAACAGACCTACATCAGCGCTCGCCAGCCTCCACCGTCTACACTGGATACCCACTGAGCCCCGCCAAGGT
CAACCAGTACCCTTACATATAAACTGGAGGGGAGGGAGGGAGGGAGGGAGGAGAGAATGGCCCGAGGGAGGA
GGGAGAGAAGGAGGGAGGCGCTCCTGGGACCGTGCGCGCTGGCCCTTTTATACTGAAGATGCCGCACACAAACAAT
GCAAACGGGGCAGGGGCGGGGGGGGGGGGGGGGGGGGGCAGAGGGCAGGGGGACGGGTGCGGGACACCACTGAACTTGA
ACCGGGAAGTGGGAGGACGTAGAGCAGAGAAGAGAACATTTTTAAAGGAAGGGATTAAAGAGGGTGGGAAATCT
ATGGTTTTTATTTTAAAAAA

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FIGURE 2435

CCTGCGTGGCTGGGCTGCTCGGGTTAGATCGTCAGGAAAAGCCTAAAGATTAGACTGTAAGAAAAGAAAATAGAA
GCCATGTTTTCGAAGACCTGTATTACAGGTACTTCGTGAGTTTGTAAGACATGAGTCCGAAACAACCTACCAGTTTG
GTTCTTGAAAGATCCCTGAATCGTGTGCACCTTACTTGGGCGAGTGGGTGAGGACCCCTGTCTTGAGACAGGTGGAA
GGAAAAAATCCAGTCACAATATTTTCTCTAGCAACTAATGAGATGTGGCGATCAGGGGATAGTGAAGTTTACCAA
CTGGGTGATGTCAGTCAAAAGACAACATGGCACAGAATATCAGTATTCCGGCCAGGCCTCAGAGACGTGGCATAT
CAATATGTGAAAAAGGGGTCTCGAATTTATTTGGAAGGGAAAAATAGACTATGGTGAATACATGGATAAAAAATAAT
GTGAGGCGACAAGCAACAACAATCATAGCTGATAATATTATATTTCTGAGTGACCAGACGAAAGAGAAGGAGTAG

AAAGGATGATTCTTCTTTGGCCATCATTGTTACAGTCTCATTTCCTCAAGTCATGTATAATCTTTATGGCTTCCAA
GGACAAGAATTAAAATACTCTTTTACGT

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FIGURE 2436

MFRRPVLRQVLRQFVRHESETTTSLVRLERSLNRVHLLGRVGQDPVLRQVEGKNPVTIFSLATNEMWRSGDSEVYQL
GDVSQKTTWHRISVFRPGLRDVAYQYVKKGSRIYLEGKIDYGEYMDKNNVRRQATTIIADNIIFLSDQTKEKE

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FIGURE 2437

GACCAGCCGTGCAAATCTCTAGAAGATGACGGTGTTCCTTTAAAACGCTTCGAAATCACTGGAAGAAAACCTACAGC
TGGGCTCTGCCTGCTGACCTGGGGAGGCCATTGGCTCTATGGAACACTGTGATAACCTCCTAAGGAGAGCAGC
CTGTCAAGAAGCTCAGGTGTTTGGCAATCAACTCATTCCCTCCCAATGCACAAGTGAAGAAGGCCACTGTTTTCT
CAATCCTGCAGCTTGCAAAGGAAAAGCTAGGACTCTATTTGAAAAAATGCTGCCCGATTTTACATTTATCTGG
CATGGATGTGACTATTGTTAAGACAGATTATGAGGGACAAGCCAAGAAACTCCTGGAACCTGATGGAACACAGGA
TGTGATCATTGTTGCAGGAGGAGATGGGACACTGCAGGAGGTTGTTACTGGTGTCTTCGACGAACAGATGAGGC
TACCTTCAGTAAGATTCCCATTTGGATTTATCCCACTGGGAGAGACCAGTAGTTTGAGTCATACCTCTTTGCCGA
AAGTGGAACAAAGTCCAACATATTACTGATGCCACACTTGCCATTGTGAAAGGAGAGACAGTTCCACTTGATGT
CTTGAGATCAAGGGTGAAAAGGAACAGCCTGTATTTGCAATGACCGGCCCTTCGATGGGGATCTTTAGAGATGC
TGGCGTCAAAGTTAGCAAGTACTGGTATCTTGGGCCTCTAAAAATCAAAGCAGCCCACTTTTTAGCACTCTTAA
GGAGTGGCCTCAGACTCATCAAGCCTCTATCTCATACACGGGACCTACAGAGAGACCTCCCAATGAACCAGAGGA
GACCCCTGTACAAAGGCCTTCTTTGTACAGGAGAATATTACGAAGGCTTGCCTCTACTGGGCACAACCACAGGA
TGCCCTTTCCCAAGAGGTGAGCCCGGAGGTCTGGAAGATGTGCAGCTGTCCACCATTAAGTGTCCATCACAAAC
ACGGAATAATCAGCTTGACCCGACAAGCAAAGAAGATTTTCTGAATATCTGCATTGAACCTGACACCATCAGCAA
AGGAGACTTTATAACTATAGGAAGTCGAAAGGTGAGAAACCCCAAGCTGCAGTGGAGGGCACGGAGTGTCTCCA
AGCCAGCCAGTGCACCTTGCTTATCCCGAGGGAGCAGGGGGCTCTTTAGCATTGACAGTGAGGAGTATGAAGC
GATGCCTGTGGAGGTGAACTGCTCCCCAGGAAGCTGCAGTCTCTGTGATCCTAGGAAGAGAGAACAGATGCT
CACAAGCCCCACCCAGTGAAGCAGCAGAAGACAAGCACTCTGAGACCACACTTTAGGCCACCGGTGGGACCAAAAG
GGAACAGGTGCCTCAGCCATCCCAACAGTGTCTGTCAGAGGGTCCCCAGGGCATTTTCATGGCAAGTACCCCTCTG
CCCCACTCCAGCAGTGCTTCCCAAGTGTGCTCTGTACCTGCTTTGCAATCGGCTTCCATTAGCGCATGTTTT
ATTTTGGTGTGACGGTTGGCCCTCCTAAACACGGACTTTCTCAGGCTGGTTCAAGACGGAAAAGGACTTTCTTC
TGTTTTCTTCCAAAGTGCAACCACAGTGGAGAGCCCACGGTGGGCTTAGCCTGCCTAGGCCCTTCCATTCTCTT
CTTTGACCGTGCTAGGAATTCCAGGAAAGTGCAATTCCTGCCCTGGTGACCTTTTCCATGTCTAGGCTCCTCCAC
AGGTGCTGCTATTTTGTGAGCTCCGGCICCTGTTTAGCTTTTATTTTCAAGTCTAACCTCAGTCCAGAAACATATG
TGAGGTTGTTTCCCTCTTCAGCCACGGCTACAATACCGGAAAATGCTAGTTTTTATTTATTTTTTAAGTAGTGC
TTCTTAAATGGTTTGCATGAGAGCCACCTGGGGTACATGTTGAAAACCTATTTGGGGTCTACCCCAAACCTAATA
ACCCAAATTTGGGGATGGGGCCAGGAATATGCATTTTAAAAAGTCATCTGCCCTTCCAGGTGATTCTGTAAG
TTGTCCCTCAACTGTACTTGGAGAAATCGTGTTTTAAAGCAGTAGTCCACAAAGTATTCTGCTCATGTGCCCCCA
AAAGTATTTTGAAAAATCATGTATACCCTCACCATCTAAGTTGATATCTAAAATTTTATCTAAGTTGGTATCTA
AAATTTTTTATGGAAGTTAAATAGTTGACAAAGTATGTATTTGCTGGTGTCTGTAAATATTGGTATTTTAAAA
TAAAAACTGTTACATCACTATTTTAAACATATCCAGTACAATTTAAATATCACAAATTTGACACCCCTCATTCT
ATTTATAAAAATAAATGAGCTAGTTCTTTAGTAGTTAAACATTTCAAATTTGGCTTTTCTCCTTCTGTATTTCCAT
ACCACTTTTAGCCAAGAATCCTATCATATAATGTAATCTATATGCCCGACATCTTTAATCATTCACCCATTAC
TTCTTGTCAACAAAAAATATAAATGGAAATTTTTTTTTTAGCTCTTGCTTAAAGTGTGTTGTTGTATCTCAGTC
CAGAACCAATATTATCGTAATTAATTATTGGTATATAATGAAAACGGTATTAATTCTTGGATGATTAAAAAGTTTT
TTTATTAGAATGTTCTTTATCCTAATTAGTTTATTTATCCAAAGATACATGAATGTGATTACAGCTGAGATGGG
GTTCAACCTCAGCTGTATTCCTTGTGTTCTGTATAGATGTAAGCACATAAATTCGATGGAATAGAATTACGTTAAC
AATGAAAAAATAAAAAA

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FIGURE 2438

MTVFFKTLRNHWKKT TAGLCLLTWGGHWLYGKHCDNLLRRAACQEAQVFGNQLIPPNAQVKKATVFLNPAACKGK
ARTLFEKNAAPILHLSGMDVTIVKIDYEGQAKKLLELEMENTDVIIIVAGGDGTLQEVVTGVLRRRTDEATFSKIPIG
FIPLGETSSLSHTLFAESGNKVQHITDATLAIVKGETVPLDVLQIKGEKEQPVFAMTGLRWGSFRDAGVKVSKYW
YLGPLKIKAAHFFSTLKEWPQTHQASISYTGPTERPPNEPEETPVQRPSLYRRILRRLASYWAQPQDALSQEVSP
EVWKDVQLSTIELSITTRNNQLDPTSKEDFLNICIEPDTISKGDFITIGSRKVRNPKLHVEGTECLQASQCTLLI
PEGAGGSFSIDSEYEAMPVEVKLLPRKLQFFCDPRKREQMLTSPTQ

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FIGURE 2439

CGCCTCCCTTCCCCCTCCCCGCCGACAGCGGCCGCTCGGGCCCCGGCTCTCGGTTATAAGATGGCGGCGCTGAG
CGGTGGCGGTGGTGGCGGCGCGGAGCCGGGCCAGGCTCTGTTCAACGGGGACATGGAGCCCGAGGCCGGCGCCGG
CGCCGGCGCCGCGGCCCTCTTCGGCTGCGGACCCTGCCATTCCGGAGGAGGTGTGGAATATCAAACAAATGATTAA
GTTGACACAGGAACATATAGAGGCCCTATTGGACAAATTTGGTGGGGAGCATAATCCACCATCAATATATCTGGA
GGCCTATGAAGAATACACCAGCAAGCTAGATGCACTCCAACAAAGAGAACAACAGTTATTGGAATCTCTGGGGAA
CGGAAGTGAATTTTCTGTTTCTAGCTCTGCATCAATGGATACCGTTACATCTTCTTCTCTTCTAGCCTTTCAGT
GCTACCTTCATCTCTTTCAGTTTTTCAAATCCCACAGATGTGGCACGGAGCAACCCCAAGTCACCACAAAACC
TATCGTTAGAGTCTTCTGCCCCAACAAACAGAGGACAGTGGTACCTGCAAGGTGTGGAGTTACAGTCCGAGACAG
TCTAAAGAAAGCACTGATGATGAGAGGTCTAATCCCAGAGTGTGTGCTGTTTACAGAATTCAGGATGGAGAGAA
GAAACCAATTGGTTGGGACACTGATATTTCTGGCTTACTGGAGAAGAATTGCATGTGGAAGTGTGGAGAATGT
TCCACTTACAACACACAACCTTTGTACGAAAAACGTTTTTTCACCTTAGCATTTTGTGACTTTTGTGCGAAAGCTGCT
TTTCCAGGGTTTCCGCTGTCAAACATGTGGTTATAAATTTACCAGCGTTGTAGTACAGAAGTTCCACTGATGTG
TGTTAATTATGACCAACTTGATTTGCTGTTTGTCTCCAAGTTCTTTGAACACCACCCAATACCACAGGAAGAGGC
GTCCTTAGCAGAGACTGCCCTAACATCTGGATCATCCCCTTCCGCACCCGCTCGGACTCTATTGGGCCCAAAT
TCTCACCAGTCCGTCTCTCTTCAAATCCATTCCAATTCACAGCCCTTCCGACCAGCAGATGAAGATCATCGAAA
TCAATTTGGGCAACGAGACCGATCCTCATCAGCTCCCAATGTGCATATAAACACAATAGAACCTGTCAATATTGA
TGACTTGATTAGAGACCAAGGATTTTCGTGGTGATGGAGGATCAACCACAGGTTTGTCTGCTACCCCCCTGCCTC
ATTACCTGGCTCACTAACTAACGTGAAAGCCTTACAGAAATCTCCAGGACCTCAGCGAGAAAGGAAGTCATCTTC
ATCCTCAGAAGACAGGAATCGAATGAAAACACTTGGTAGACGGGACTCGAGTGATGATTGGGAGATTCTGATGG
GCAGATTACAGTGGGACAAAGAATTGGATCTGGATCATTGGAACAGTCTACAAGGGAAAGTGGCATGGTGATGT
GGCAGTGAAAATGTTGAATGTGACAGCACCTACACCTCAGCAGTTACAAGCCTTCAAAAATGAAGTAGGAGTACT
CAGGAAAACACGACATGTGAATATCCTACTCTTCATGGGCTATTCCACAAAGCCACAACCTGGCTATTGTTACCCA
GTGGTGTGAGGGCTCCAGCTTGTATCACCATCTCCATATCATTGAGACCAAATTTGAGATGATCAAACCTTATAGA
TATTGCACGACAGACTGCACAGGGCATGGATTACTTACACGCCAAGTCAATCATCCACAGAGACCTCAAGAGTAA
TAATATATTTCTTCATGAAGACCTCACAGTAAAAATAGGTGATTTTGGTCTAGCTACAGTGAAATCTCGATGGAG
TGGGTCCCATCAGTTTGAACAGTTGTCTGGATCCATTTTGTGGATGGCACCAGAAGTCATCAGAATGCAAGATAA
AAATCCATACAGCTTTCAGTCAGATGTATATGCATTTGGAATTGTTCTGTATGAATTGATGACTGGACAGTTACC
TTATTCAAACATCAACAACAGGGACCAGATAATTTTATGGTGGGACGAGGATACCTGTCTCCAGATCTCAGTAA
GGTACGGAGTAACTGTCCAAAAGCCATGAAGAGATTAATGGCAGAGTGCCTCAAAAAGAAAAGAGATGAGAGACC
ACTCTTTCCCCAAATTTCTCGCCTCTATTGAGCTGCTGGCCCGCTCATTGCCAAAATTCACCGCAGTGCATCAGA
ACCCCTCCTTGAATCGGGCTGGTTTCCAAACAGAGGATTTTAGTCTATATGCTTGTGCTTCTCCAAAACACCCAT
CCAGGCAGGGGGATATGGTGCCTTTCTGTCCACTGAAACAAATGAGTGAGAGAGTTCCAGGAGAGTAGCAACAAA
AGGAAAATAAATGAACATATGTTTGCTTATATGTTAAATTGAATAAAATACTCTCTTTTTTTTTTAAGGTG

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FIGURE 2440

GGCACGAGGGTGTCCCTCCCCGCCCGGCTGGAGGCTGCTCCGGACCGGGACGCAGAGTCTGCGGACCCGGCGCCG
AGGCGGCCACCCGAGACGCGGCGCGCACGCTCCGGCCTGCGCAGCCC~~GGCCCGGCC~~ATGGCGGCCCCCCGCCCGT
CTCCCGGATCTCCGTTTCGGTCTCGGCTCCGGCTTTTTACGCCCCGCAGAAGAAGTTCGGCCCTGTGGTGGCC
CAAAGCCCAAAGTGAATCCCTTCCGGCCCGGGACAGCGAGCCTCCCCGGCACCCGGGGCCAGCGCGCACAGA
TGGGCGGGGTGGGCGAGATTCCCCGCCGCCCGGGAAGACTTTCCCTGCCTCCACCTCCCTTGCTGGGGATG
GCGACGATGCGAGGGGTGCTCTGGGAGGTGCCTTCCCGCCGCCCTCCCCGATCGAGGAATCATTTCCCCCTG
CGCCTCTGGAGGAGGAGATCTTCCCTTCCCCGCCGCTCCTCCGGAGGAGGAGGGAGGGCTGAGGCCCCCATAC
CGCCCCACACAGCCAGGGAGAAGGTGAGCAGTATTGATTGGAGATCGACTCTCTGTCTCACTGCTGGATG
ACATGACCAAGAATGATCCTTTCAAAGCCCGGGTGTCTGATATGTGCCCCACCAAGTGGCCACTCCATTCA
GTTCCAAGTCCAGTACCAAGCCTGCAGCCGGGGGCACAGCACCCCTGCCTCCTTGGAAGTCCCTTCCAGTCCC
AGCCTCTGCCCCAGGTTCCGGCTCCGGCTCAGAGCCAGACACAGTTCCATGTTTCAGCCCCAGCCCCAGCCCAAGC
CTCAGGTCCAACCTCCATGTCCAGTCCAGACCCAGCCTGTGTCTTTGGCTAACACCCAGCCCCAGGGGCCCCAG
CCTCATCTCCGGCTCCAGCCCCTAAGTTTTCTCCAGTGACTCCTAAGTTTACTCCTGTGGCTTCCAAGTTCAGTC
CTGGAGCCCCAGGTGGATCTGGGTCAACCAAATCAAAAATTGGGGCACCCCGAAGCTCTTTCTGTGGCACAG
GCTCCCCCTCAACCTCCCAGCTTACCTATGCCAGCAGAGGGAGAAGCCCCGAGTGCAGGAGAAGCAGCACCCCG
TGCCCCACCGGCTCAGAACCAAACAGGTGCGCTCCCTGGGGCCCCAGGGCCCCTGACTCTGAAGGAGGTGG
AGGAGCTGGAGCAGCTGACCCAGCAGCTAATGCAGGACATGGAGCATCCTCAGAGGCAGAATGTGGCTGTCAACG
AACTCTGCGGCCGATGCCATCAACCCCTGGCCCGGGCGCAGCCAGCCGTCCGCGCTCTAGGGCAGCTGTTCCACA
TCGCCTGCTTACCTGCCACCAAGTGTGCGCAGCAGCTCCAGGGCCAGCAGTTCTACAGTCTGGAGGGGGCGCCGT
ACTGCGAGGGCTGTTACACTGACACCCTGGAGAAGTGTAACACCTGCGGGGAGCCCATCACTGACCGCATGCTGA
GGGCCACGGGCAAGGCCTATCACCCGCACTGCTTACCTGTGTGGTCTGCGCCCGCCCCCTGGAGGGCACCTCCT
TCATCGTGACCAAGGCCAACC GGCCCCACTGTGTCCCGACTACCACAAGCAGTACGCCCCGAGGTGCTCCGTCT
GCTCTGAGCCCATCATGCCTGAGCCTGGCCGAGATGAGACTGTGCGAGTGGTCCCTGGACAAGAAGTCCACA
TGAAGTGTTACAAGTGTGAGGACTGCGGGAAGCCCCGTGTCGATTGAGGCAGATGACAATGGCTGCTTCCCCCTGG
ACGGTCACGTGCTCTGTGGAAGTGCCACACTGCTAGAGCCAGACCTAGAGTGAGGACAGGCCCTCTCAGACCG
CAGTCCATGCCCCATTGTGGACCACCCACACTGAGACCACCTGCCCCACCTCAGTTATTGTTTTGATGTCTAGC
CCCTCCCATTTCGAACCCCTCCCTAGCATCCAGGTGCCCTGACCCAGGACCCAACATGGTCTAGGGATGCAGGA
TCCCCGCCCTGGGTCTGGTCTCGCCATCCTGCAGGGATTGCCACCGTCTTCCAGACACCCACCTGAGGGG
GGCACCAGGTTTAGTGCTGTGCTTTCACTGCTGCACCCGCGCCCTCGGCCGGCCCCCGAGCAGCCTTTGTACT
CTGCTTGCGGAGGGCTGGGAGACCCTCCAGGACATTCCACCCCTCCCCCATGCTGCCAAGTTGTAGCTATAGCTA
CAAATAAAAAAAAAACCTTGTTTTCCAGAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2441

MAAPRPSPAISVSVSAPAFYAPQKKFGPVVAPKPKVNPFRPGDSEPPAPGAQRAQMGRVGEIPPPPPEDFPLPF
PFLAGDGDDAEGALGGAFFPPPPPIEESFPPAPLEEEIFSPPPPPPEEEGGPEAPIPPPPPQPREKVSSIDLEIDS
LSSLLDDMTKNDPFKARVSSGYVPPPVATPFSSKSSTKPAAGGTAPLEPPWKSPSSSQPLPQVPAPAQSQTFHVQ
PQPQPKPQVQLHVQSQTQPVSLANTQPRGPPASSPAPAPKFSVTPKFTPVASKFSPGAPGGSGSQPNQKLGHPE
ALSAGTGSPQPPSFTYAQQREKPRVQEKQHPVPPPAQNQNQVRSPGAPGPLTLKEVEELEQLTQQIMQDMEHPQR
QNVAVNELCGRCHQPLARAQPAVRALGQLFHIACFTCHQCAQQQLQGQQFYSLGAPYCEGCTDTLEKCNCTCGEP
ITDRMLRATGKAYHPCFTCVVCARPLEGTSFIVDQANRPHCVDPYHKQYAPRCSVCSEPIMPEPGRDETVRVVA
LDKNFHMCKYKCEDCGKPLSIEADDNGCFPLDGHVLCRKCHTARAQT

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FIGURE 2442

GGCACGAGGGGCGGCGGAGCCGACTCGTCGCGGCCGAGGCGCACGCGGTCCGCGCCGGCGTCAGTCTGGGATTGG
 CCGGCCCCGCGACTTCCTCCGCCCCCTGCCAATCGCCGGGACGACTTCCGTGGGTTTTTCCGGCTCTCCCGCGTC
 GCTAAGGAGCGACGGGCTGTCGGCCAGACCCCGAGTTCTCGGTGCGCTCAGCGGCCCGCGACGCTAGGAGGCCGC
 GCTCCGCCCCCGCTACCAATGAGGCCCGGAAAGCCTTCTGCTCCTGCTGCTCTTGGGGCTGGTGCAGCTGCTGG
 CCGTGGCGGGTGCCGAGGGCCCGGACGAGGATTCTTCTAACAGAGAAAATGCCATTGAGGATGAAGAGGAGGAGG
 AGGAGGAAGATGATGATGAGGAAGAAGACGACTTGAAGTTAAGGAAGAAAATGGAGTCTTGGTCTTAAATGATG
 CAACTTTTGATAATTTTGTGGCTGACAAAGACACAGTGTGCTGGAGTTTTATGCTCCATGGTGTGGACATTGCA
 AGCAGTTTGTCTCCGGAATATGAAAAAATTGCCAACATATTAAAGGATAAAGATCCTCCCATTCTGTGGCAAGA
 TCGATGCAACCTCAGCGTCTGTGCTGGCCAGCAGTTTGATGTGAGTGGCTACCCCAACCATCAAGATCCTTAAGA
 AGGGGCGAGGCTGTAGACTACGAGGGCTCCAGAACCAGGAAGAAAATTGTTGCCAAGGTGAGAGAGTCTCCAGC
 CCGACTGGACGCCTCCACCAGAAGTCACGCTTGTGTTGACCAAAAGAGAACTTTGATGAAGTTGTGAATGATGCAG
 ATATCATTCTGGTGGAGTTTTATGCCCATGGTGTGGACACTGCAAGAACTTGCCCCCGAGTATGAGAAGGCCG
 CCAAGGAGCTCAGCAAGCGTTCTCCTCCAATTCCTTGCCAAAAGGTGCGACGCCACCGCAGAAACAGACCTGGCCA
 AGAGGTTTGATGTCTCTGGCTATCCCACCCTGAAAATTTCCGCAAAAGGAAGGCCCTTATGACTACAACGGCCCCAC
 GAGAAAAATATGGAATCGTTGATTACATGATCGAGCAGTCCGGGCCCTCCCTCCAAGGAGATTCTGACCCTGAAGC
 AGGTCCAGGAGTTCTGAAGGATGGAGACGATGTCAATCATCATCGGGGTCTTTAAGGGGGAGAGTGACCCAGCCT
 ACCAGCAATACCAGGATGCCGCTAACACCTGAGAGAAGATTACAAATTTACCCACACTTTTCAGCACAGAAATAG
 CAAAGTTCTTGAAAGTCTCCAGGGGCGAGTTGGTTGTAATGCAGCCTGAGAAAATTCAGTCCAAGTATGAGCCCC
 GGAGCCACATGATGGACGTCCAGGGCTCCACCCAGGACTCGGCCATCAAGGACTTCGTGCTGAAGTACGCCCTGC
 CCCTGGTTGGCCACCGCAAGGTGTCAAACGATGCTAAGCGCTACACCAGGCGCCCCCTGGTGGTCTGCTACTACA
 GTGTGGACTTCAGCTTTGATTACAGAGCTGCAACTCAGTTTTGGCGGAGCAAAATCCTAGAGGTGGCCAAGGACT
 TCCCTGAGTACACCTTTGCCATTGCGGACGAAGAGGACTATGCTGGGGAGGTGAAGGACCTGGGGCTCAGCGAGA
 GTGGGGAGGATGTCAATGCCGCCATCCTGGACGAGAGTGGGAAGAAGTTCGCCATGGAGCCAGAGGAGTTTGACT
 CTGACACCCTCCGCGAGTTTGTCACTGCTTTCAAAAAAGGAAAACTGAAGCCAGTCATCAAATCCCAGCCAGTGC
 CCAAGAACAACAAGGGACCCGCTCAAGGTGCTGGTGGGAAAGACCTTTGACTCCATTGTGATGGACCCCAAGAAGG
 ACGTCTCATCGAGTTCTACGCACCATGGTGCGGGCACTGCAAGCAGCTAGAGCCCGTGTACAACAGCCTGGCCA
 AGAAGTACAAGGGCCAAAAGGGCCTGGTCAATCGCCAAGATGGACGCCACTGCCAACGACGTCCCCAGCGACCGCT
 ATAAGGTGGAGGGCTTCCCACCATCTACTTCGCCCCAGTGGGGACAAAAAGAACCCAGTTAAATTTGAGGGTG
 GAGACAGAGATCTGGAGCATTGAGCAAGTTTATAGAAGAATGCCACAAAATGAGCAGGACCAAGGAAGAGC
 TTTGAAGGCCGTGAGGTCTGCGGAAGGTGGGAGGAGGCAGACACCCTGCGTGGGCCATGGTCCGGGGCGTCCACGCC
 GAGGCCGGCAACAACGACAGTATCTCGGATTCTTTTTTTTTTTTTTTTAAATTTTTTATACCTTTGGTGTTCAC
 TTCATGCTCTGAATACTGAATAACCATGAATGACTGAATAGTTTAGTCCAGATTTTACAGAGGATACATCTATT
 TTTATCATTATTTGGGGTTTGAAAAATTTTTTTTTTACACCTTCTAATTTCTTATTCTCAAAGCAGATAATTCT
 TCTGTGTGAAAATGTTTTCTTTTTTTAATTTAAGGTTTAAATTCCTTTGCCAAATCATGTTGATTTTGCTCTTT
 GCTTTTTCTGTTGCTGAGAAATTGTTGGCGTAGATTTGGCTTCTGGTATGTGTTTCTGATTGCTTCTCTGTGAGC
 ACAAAGTGAGAGCTGCCACTGAGCAGCCCTGACAGGGGTGCTGTTTCAGGCTGGGCATCGCCAGGCGGCCCTCCCT
 GCAAACCAAGGGCTGGGGGCAAAGGGGCATGATCCAGGGTCCCCAGGGTGGGCTCAGCTCCAGGGAGAGGGCCAC
 CCAGTGGCAGCCCCACCTCTTGAGAGCCCCAGTGCCGGAGCAGAAAGGACCCTGGACCCAGAGGCAGATACTG
 CGGGGTGGTAGAAAAGGTAGAGTAGGCTGTGGCAATGGAATAAAACACGATTAAAAACGTTAAAAA
 AAAAA

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FIGURE 2443

MRPRKAFLLLLLLGLVQLLAVAGAEGPDEDSSNRENAIEDEEEEEEDDDDEEEDDLEVKEENGVLVLNDANFDNF
VADKDTVLLLEFYAPWCGHCKQFAPEYEEKIANILKDKDPPIPVAKIDATSASVLASRFDVSGYPTIKILKKQAVD
YEGSRTQEEIVAKVREVSQPDWTTPPEVTLVLTENFDEVNDADIILVEFYAPWCGHCKKLAPEYEKAAKELSK
RSPPIPLAKVDATAETDLAKRFDVSGYPTLKIFRKGRPYDYNPREKYGIVDYMIEQSGPPSKEILTLKQVQEF
KDGDDVIIIGVFKGESDPAYQQYQDAANNLREDYKFHHTFSTEIAKFLKVSQQLVVMQPEKFQSKYEPRSHMD
VQGSTQDSAIKDFVLKYALPLVGHRKVSNDKRYTRRPLVVVYYSVDFSFDYRAATQFWRKVLVAKDFPEYTF
AIADEEDYAGEVKDLGLSESGEDVNAAILDESGKKFAMEPEEFDSDTLREFVTAFKKGKLKPVIKSQPVKNNKG
PVKVVVGKTFDSIVMDPKKDVLIIEFYAPWCGHCKQLEPVYNSLAKKYKGQKGLVIAKMDATANDVPSDRYKVEGF
PTIYFAPSGDKKNPVKFEGGDRDLEHLSKFIEEHATKLSRTKEEL

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FIGURE 2444A

GCCGCCGAAGGGGACTGTTTGCTCCTACGGGCTGTAGATGGAGCTGTCCGGCCCCGAGAGGGGGAAGGCGCCTG
GAAAACGTTCTTCTTCTCCTGGCCGACCCGAGCGGGGAACAGCACTCCCAGGATCAGTGTGTCAACACGGC
CGCAGCCTCAGCAGCTGGGCATCCAGGGCCTGGGGCTGGACAGCGGGAGCTGGAGCTGGGCCCAGGCTCTGCCCC
CGGAGGAGGTCTGCCACCAGGAGCCGGCGCTGCGCGGGGAAATGGCCGAGGGAATGCCGCCATGCAGGCTCAAG
AATGGGACATGGACGCCCGGGCGGCCAATGCCTTTTCAGTTCCCAACCTTTCCAGATAGGGACCTGTCTTCCCCG
ACCGCATGATGCGAGAGCCCCAGTTGCCACAGCAGAGATCTCACTCTGGACTGTGGTGGCTGCCATTAGGCTG
TGGAGAGGAAGGTGGATGCCAGGCCAGCCAGCTGCTGAACCTGGAGGGGCGCACGGGGACAGCCGAGAAGAAGC
TGGCCGACTGTGAAAAGACGGCCGTGGAATTTGGGAACCATGGAGAGCAAGTGGGCCGTGTGGGGACCCTGC
TGCAGGAGTACGGGCTGTGTGAGAGGCGGCTGGAGAACTTGGAGAACTTGTGTGCAACAGGAACTTCTGGGTCC
TGCGGCTGCCCCCGGGCAGCAAGGGGGAGGCCCCCAAGGTTCCAGTGACTTTTGTGACATTGTGTGTACTTCT
CCGAAGACGAGTGAAGAATTTGGACGAATGGCAGAAGGAGCTTTATAACAACCTTGTTAAGGAGAACTACAAAA
CCCTCATGTCCCTGGACGCGGAGGGCTCAGTCCCCAAGCCAGATGCTCCAGTCCAGGCTGAGCCCAGGGAAGAAC
CTTGTTGTGGGAGCAGCGCCACCCCGAAGAGAGAGAAATCCCAATGGATCCCGAAGCAGGAGCAGAGCCCCCTGG
TGCTGCGCAGGATGCGTCTCTCCAGGTGAAGCGTGAGGACACCTGTGTGTCCGGGGTCAGCGGGGCTGGAGG
AAAGAGCCATCCCTACGGAATCCATTACCGACTCCCCAATTTCTGCCAGGACCTCTTGTCCCGGATTAAACAGG
AGGAGCATCAGTGCCTGTGGGATCAGCAGGATTGGCAGACAGAGATATCCACGGATCCCAATTCAGAGTCTC
TCATCTCAGCACATGACATTTTGTCTGATCAAGCAGGAGGAGCAGCCATACCCATGGGGACCACGCGACTCAA
TGGACGGAGAGCTTGGATTAGACTCTGGCCCTAGTGACAGCCTGTGTATGGTGAAGAACCCACCCCGGCCCCGC
CACAGCCCCAGCCCCAGCCCCAGCCACCGCAGCCGAGCTGCAGTGCAGCCCCAGCCCCAGAGCCTGCCCCCA
TCGCGGTGGCCGAGAACCCGGGCGGCCCCCGAGCCGAGGGCTGTGTGACGACGGTTTCCAGGTGTGCCCCGGG
AGCGTGGCTCCGGCGAGGCGCCGCCGGGTGGGGACCGCAGCACCAGGGGGCGGCGGGGGCGATGGGGGCGGTGGG
GCGGCGGCGCGGAGGCGGGGACGGGGCAGCGGCGGCTGTGGCAGCTGTGCTGCCCTGGCGGGCTGCGGCGGAGCC
TCCTCCTGCACGGCGCCCGCAGCAAGCCCTACTCGTGCCCCGAGTGCGGCAAGAGCTTCGGCGTGCAGCAAGACC
TATCATCCACCACCGCAGCCACACCAAGGAGCGGCCCTACGAGTGCCTGAGTGCAGAGAAGAGCTTCAACTGCC
ACTCGGGCTCATCCGCCACCAGATGACGCACCGCGGCGAGCGGCCCTACAAGTGCCTCGGAGTGCAGAGAAGACCT
ACAGCCGTAAAGGAGCAGCTGCAGAACCCAGCGGCTGCACACGGGCGAGCGGCCCTTTCCAATGTGCACTGTGCG
GCAAGAGCTTCATCCGCAAGCAGAACCTGCTCAAGCACCAGCGCATCCACACGGGCGAGCGCCCTACACGTGCG
GCGAGTGCGGCAAGAGCTTCCGCTACAAGGAGTCTGCTCAAGGACCACTGCGCGTGCACAGCGGCGGCCCCGGCC
CCGGCGCCCCCAGGCGAGTCCCCGCCGCTCCTGAGCGAGACTAGGGCTGGGCTGGGGGAGGGCAGGGCCGGACGG
AGTGGATCGGGGGCGGCTGAGCACCAACCACTTGCCGGGTGTCTCCTCAGCCACCGTCTGGAATCGGCAACAGG
CATTGCACTCCGTTTGGGGTCCCCAGGGTGGGGCAGGGATCCCCCAGATCTGTCTGGTCTGAATGGACGCCAG
CTCATCTAGGGTGGACCCAGCTGTGGGGAAGAGCCAGGGGGACCGCGAGGAGCCGAGCGTCTCGGGCACC GCC
CTCACACCTCCTCGAGTGCCCTGGGACCACTGGGCCACAGATGGTTCATCAGGGGAAGCCACCAGGGAGTCCCGAA
GCCCTTCTGAGATCAGGAAATCAGGTCCCAAGGTTAGGAGACGCCCTGAAAAAAGCGAAGGCCGAGGGATGTGC
TAAGGGTAACACCTTCATGATGACAACACTGCCTCGCGTTTTCAATAGCGCTTTATACTTTTTTAAGTGTTTTCTA
TCCGTTATCCATTTACCCCTTGGCCTATCCCTCTCAGATAGGTGGGGTAGGATTTTCTGGTGACCGAGTAAAGT
GAGAGGCAGGTGAGACGGTTCACCCAATCACACGGGAAGGGGCGCGCTGCCCAACCGCGCTCTCCGCCTACCT
CCGCTGTCTCGGGAAGCTGTGTGGCTGGCCCTCCTGGTCTCTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT
TCACCCACGGATAAAACAGAGCGACAGGAGGCCAGCTCCTGGGGTTCTGGGAGCCGGGAACAGATTGGCTAC
GGAACGCCCCAGGTGTACATTACAGAGGGCTCTTCTCCATGGGAGCTCCTGGTGCCGCTCGGCCCCAGCCTGT
CCCCAGCCCCCTCAATCTGGTGCAGCAGCATCTTGTCACTGCACAACAGTGGCCTGGTCCCCCAGGCGAGTTAGG
GCCCCAGGTGAGACCTCACCATGATGATTTGTTCCAGTTCTCCAGGGCAGAGGGGCGAGGGAGAGGCTTTTGCT
GTGAGAGTAGCCGTACGTGTCTTCTCCAGCAGCGCCGGGCAAGTGGGTGCTAGAGTCTGAGCCTCAGGCTCTC
CTGCCCTGGGCTCCCAATTGGTGCTATCTGTTACTGCCGTGCTCACGGACATGGATACAGACCCTGCTGTGCT
CCACACCTGCAGGCGCCTCGGGAAGCGCCCAAAGGATTCCCTTACGTTGGTGCACCTGCTCCATAGCTCCGG
GCGCTGCGTCCCGAGGGGCCACAGTCTCCATTTACGCTTTCATGAGCCTGGCACCGGGTGGGTGGTATGCC
CAGGACCTTGTGTTGTCAAAAATGACTTTCCCTGCCCTTGGCGTGGGTCCGGCGTTTCTCCAGCCGGGATCA
CAGTGGGCAGCCGGCACCCGGCACCACTTTGGCGAGCGTCTGCTTCCGCCCTCGCCCTCATCTACGCTGCTCCG

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FIGURE 2444B

CTTTCCTCAGACCCCTTTTTGCCGTGCAAAGGGAATTCTTGACATTAAATAAAAGGTATCCAGATTGCAGACTGC
ATGTTACAGAGCTGGGGGTTCTCCAGCTTGCCTACAGTAAAGCCTCAATGAACTGG

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FIGURE 2445

MQFVSTRPQPQQLGIQGLGLD SGSWAQA LPPEEVCHQEPALRGEMAEGMPPMQAQEWDMDARRPMPFQFPFPF
 DRAPVFPDRMMREPQLPTAEISLWTVVAAIQAVERKVDAQASQLLNLEGRGTGAEEKLADCEKTAVEFGNHMESK
 WAVLGTLLQEYGLLQRRLENLENLLRNRNFWVLRLP PGSKGEAPKVPVTFVDIAVYFSEDEWKNLDEWQKELYN
 LVKENYKTLMSLDAEGSVPKPDAPVQAEPREEPCVWEQRHPEEREIPMDPEAGAEPLVPAQDASSQVKREDTLCV
 RGQRGLEERAIPTESITDSPISAQDLLSRKQEEHQCVWDQQDLADRIDPTDPNSESLISAHDILSWIKQEEQPY
 PWGPRDSMDGELGLD SGPSD SLLMVKNPPAPPQPQPQPQPQPQLQSQPQPQSLPPIA VAENPGGPPSRGLLDD
 GFQVLPGERGSGEAPP GGDRSTGGGGGDGGGGGGGA EAGTGAGGGCGSCCPGGLRRSLLLHGARSKPYSCEPCGK
 SFGVRKSLI IHRSHTKERPYECAECEKSFNCHSGLIRHQMTHRGERPYKCSECEKTYSRKEHLQNHQRLHTGER
 PFQCALCGKSFIRKQNLKQRIHTGERPYTCGECGKSFYKESLKDHLRVHSGGPGPGAPRQLPPPPERD

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FIGURE 2446

TCTTGTCCCGGATTAAACAGGAGGAGCATCAGTGC GTGTGGGATCAGCAGGATTTGGCAGACAGAGATATTCCCA
CGGATCCCTCGGGAAGCGCCCAAAGGATTCCCCTTCACGTTGGTGCACCTGCTCCATAGCTCCGGGCGCTGCGTC
CCGAGGGGGCCACAGTCTCCATTTACAGCGTCTTG CATGGCCTGGCACC GGGTGGGGTGGTATGCCCCAGGACCCTT
GTTTGTGTCAAAAATGACTTTCCCTGCCCTTGCCGTGGGTCCGGCGTTCCCTCCCAGCCGGGATCACAGTGGGCAG
CCGGCACCCGGCACCACCTTTGGCGAGCGTCCTGCTTCCGCCCTCGCCCTCATCTACGCTGCTCCGCTTTCCTCAG
ACCCCTTTTGGCCGTGCAAAGGGAATTCTTGACATTAAATAAAAGGTATCCAGATTGCAGACTGCATGTTACAG
AGCTGGGGGTTCTCCAGCTTGCTTACAGTAAAGCCTCAATGAACTGG

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FIGURE 2447

AGTGCCTGCGCTTCTTCCAGCAGCGCAAGAGCCTGCTGCTGCACCAGCGCCTGCACACCGGCAATGGCCAGGGCT
GGCCCGCCTGCCCCTACTGCGGCAAGGCCTTCCGCCGGCCCTCGGACCTCTTCCGGCACCAGCGCATCCACACCG
GTGAGCGGCCCTACCAGTGCCCCCAGTGTGGCCGGACCTTCAACCGCAACCACCACCTGGCCGTGCACATGCAGA
CCCACGCCCCGAGGCCAGGTGGGCCACACTTCCCTGCCGCCCGCCCGCCACGGGAGCCTGCCCTGCCCTGGC
CCAGCCGGAAGGAGGAGGGCTGACCTGGCAGGAGCCACAGAGGACCCCTGGCGGGGTCTCTCCCCTGTGCCTGA

CGCAGGTTCTTCCTTTTCCTGGGATGGAGAGAGGTTTGTGTGTTTTTACCCATTCAAATGGGAAGCTAGCTGCCCT
TCTGGTGACATTGTGTGTGACCGGGTGCTTCTGTTCCTGTTTGCACCTCTTCGCTGCCCTTTTCTGCATTCTCTGA
CTTCTAAAAGATGCCCTTAAGGCTTAAGGGATGCCATATTTTTGATAAGGCCTCTGGTAGGTACCACAGCCAAGAG
GACCAGAGATCATGGCCCTTCCAGTATGGGGCGATAGAGACATCGGGGACCTGGGATTTTTGTGTTTGTGCAGAG
ATCTCCTGCCTGCTGTCAACATGAGAAACAGTGGAGTGGAGTGGATGGATGGCCTGACTTGAAGAAAGGGCCCTG
GAAAGTTTTCTACTTTGCTATTTGAAATTTTTTCCCTTCTTATAGAGACTTTGAAATACTTTTGTAAATGTGT
GTAGTTGTTAATGGAACCTTGCCTTTTGCAAAGTCGGAAGAGTCGGCTTTTCCATGTGAGGCTCGCAGAGCTGA
AAGGGGAGCTACGTCCACCAGCCTGTGGGTCTTTTGGTTTTTTTTTGTGTTGTTGTTGTTTTTTAAGATGGA
GTTTCACCTCTTGTGCCCAGGCTGGAGTGCAATGGTACAATCTCCGCTCACTGCAACCTCCGCCTCTCGGGTTCA
GGTGATTCTCCTGCCCTCAGCCTCCTGAGTAGCTGGGATTACAGGCGCCACCACCACTCCCGGCTAATTTTTGTA
TTTTTAGTAGAGACAGGGTTTCATCATGTTGTCCAGACTGGTCTCGAACTCCTGATGTTAGGTGACCCGCACACC
TCGGCCTCCTGAAGTGCTGGGATTACAGGCGTGAGCCACCACCTCTGGCCCAGCCTGTGGGTTTTGTGAGGGATG
TCTTGGCTGCTGTCTTGGAGGCACAGTGTCTCCCCATGTGTGTGTTTCTTGGCCCAGAGTGACTCCCAGTATTCC
TAGTCTTCCCCACAGGATAGTCACATCCATTATTTACTTTTGTGTGCTAGCTGGGAGGGGAACTGAAGCCTGGA
CACGTCTCCCCAAGGGCTCAGTGTTTCATGGGTGTGTAAGATCCATTGACTGGACCCAGAAAGCACCCCTGAGGGG
CAGTGCAGAGAGAGCCCAGGAAGCCCTCCACTAGAGGAGGCCCTTGGTCTGGCTGAGGACCACGTCCACCCTGG
GCCTCCAGGCCCTGCTTTTACATTAAAGGCGGGGAGTCTCCTCTCAAAGGAGTTCTCCCTTGAGCACTTTGGGC
TCTGGGGCAGAGTTGGGCTAGGAGATCTGGGTGAATCCTTTAGTCACAGCTAGTCTCATGTTCTCTCTGTCAA
AGGGGTGATGGCCCCAGTGTGCTTACCTCAGAGTTGTGAGGGTCAAAGTAACAGGCACTGGGACAAATATGAAG
CCTAGCTTTGTGCTTCTTTCAAATTCAGGGCTCCTTTCTACTCCATTCCAGCCTTTTTTCTGTGTCAGATCC
CTCAGGAAGGACCTTTATCTTCTGGAGTGAGTGGCAGTTCCTACTGGGTTCAGTGAAAGAGTCGCCCATGGGGCTC
TGTTCCCCCAGGAGTCCCTTGTATTTTGGTGAACAAATCTTACCAAAGCATGAGATTGCGACTGTAGAAGTTGAG
ACTGCCTCAGTTCAGACTGCCTCATGGGGCAGTCTGGAGGTCAGCTGGCTTCTGGTGTCTCTCATCACACCCTG
CGGACGCTGTCTGTAGAGCAGCCTTGGTGTGGGTGACTCTGAAGCTGGAGTGATGGGACCCAGCTATCCTTGTT
TTTTACCGCCTTGTCTGGCACTGTGACCACGCTTCAGGGCTGCTTCTGGGGGTCTTGGTCCCTGGATGTGCCATT
TCTCTGGGAGGAGAGTGAGTATACAAGTCAGTGACAGTTCAGCCAGGCTCCCTTGGGTTTGGGAAGAGGCACTGC
CCTTCTGTGCTGTGGATCCTGCTTGTCTGCTCTGGAGTCCCCCACCCTTGCCAGGAGCTTCACAAACCAGAGAC
GGGCTGTCAGCAAGAGCTCAGACAGGATGTGGTGCAAGTGCAGGTGCACGAGTTTAAACCCTCAGCTGCAGGAGCT
AGTCTCAGGTGTTCTGGGGATGCCTCAGGCTAAGAATTTTGCCGACTTTCTGGGCTTGGTTGGCTAATGCCAAAT
GCCCCTGCTTAAATATCACAAGGTGCTGATTCTCCTTTTTTCTTTTTTTCATAACCAATGTGCTCAAACCTTTGAGC
TAGGCTTTGTGAGTTTGCTAGCACTCAGACCTGTTTAAAGTAACGTTCTTTACATTGAAACAAGTCAACCGAAGC
TTTGTGGTGCAGGAGCTGAGGGTGCCCCAGACTCAGTGGGAGCCCTGGTTGGGCCCCAACTCTCCAGCAGGGT
CCTCGGTTTCTCATTTGTGAAATAAATGAGTGGGCCACGACGTTAATAAGCCCAAGAGAAGTGTGAAGGTGGTA
GTCCCTTGCCCTAATTGGTGCTCAATAAAGTTGTTGGCAT

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FIGURE 2448

MARAGPPAPTAARPSAGPRTSSGTSASTPVSGPVSAPSVAGPSTATTTWPCTCRPTPEARWAHTSLPPPPATGAC
PCPGPAGRRRADLAGAHRGPLAGSLPCA

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FIGURE 2449

GCACGAGGCCAGCTTGGCCAGTGGCTCCGCAGGCTGCCGGCTCCACCCCTCAGGGACTGGCTGGCTTCGAGCAGG
GCATCGGAACCAGGCCTCCTGGCACTGGCCTGGGTAGAGCCAGGGCGAGCACCAGCTGACCCCACTGGGAACCCCT
GTGACAGTCCCTGCCAGGGCCAGGCCATCCCAACCGACTTCCATCTCATGGACCCCTCCAGCGGAGAAGCCGGGAG
AGGCTGGCGGACTGCAGATCACACCCAGCTGCTGAAGTCACGCACAGGCGAGTTCTCCCTGGAGTCCATCCTGC
TACTGAAGCTGCGTGGCTTGGGACTGGCTGACCTGGGCTGCCTGGGAGAGTGCCTGGGCTGGAGTGGCTGGACC
TATCAGGCAACGCGCTCACCCACCTGGGCCCCTGGCCTCCTTGCGCCAGCTAGCTGTGCTCAATGTCTCCAACA
ATCGGCTGACGGGCCTGGAGCCACTGGCCACCTGTGAGAACTTGAGAGTCTCAATGCCGCAGGCAACCTACTGG
CCACCCCGGGCCAGCTGCAGTGTCTGGCTGGGCTACCGTGCCTGGAGTACCTGCGGCTCCGAGACCCCTTTGGCCC
GGCTCAGCAACCCGCTCTGTGCCAACCCCTCCTACTGGGCTGCAGTCCGGGAGCTGCTGCCTGGCCTGAAAGTCA
TCGACGGTGAGCGTGTGATTGGGCGTGGTAGTGAGTTCTACCAGCTGTGCCGAGACCTGGACAGCTCCTTGCGTC
CCAGCTCCAGTCCAGGCCCCAGAGCCACCGAGGCCAGCCCTGGGTGGAGCCAGGCTACTGGGAGTCCCTGGCCCA
GCCGGAGCAGCTCCATCCTGGAGGAGGCCTGCCGGCAGTTCCAGGACACACTGCAGGAGTGTGGGACCTGGACC
GCCAGGCCAGCGACAGCCTGGCCCAGGCGGAGCAGGTACTCAGCTCTGCGGGCCCCACCTCTTCTTCTGCTCTTCT
GAACGTGGCCTATGGCCCAGGACAGCCTGGCAGGTGGCCTCGCTGCCCCAGTTCCCTCTCTGCCCCCACTC
GTCTTAGTTGCTTACACTGGTCACTGGCCCTGCACACTGGGCTATTGCTTTATCCCTATCCTGAGAGCAGCCCC
TCCCCACCATCCCTCCACATGCTGCAAGGACAGACTGAAGGGCTGTGAGCAGGTGTAAGGGCTCCCACATCCGTG
AGCCTGTGTCCGCAGCTGCTGCCACTCTGGGCTGCTCCAGCCTGCAACTTAGTGGAAGGAATTACTTCCTCCTGA
GGCTACAGGCGAGAAAGGTAGGGATGGGCCAGCCTCCCGTCTCAGCTGTTGGGAGACAGTAGGCAGGCTGAGTGG
CCCAGAGCACTCCTGGAAGTGGGACTCCCTGCCTTGCAAATGTGCCTCTCCAGACTGCTCCTGCACTTACCCCC
TCCCCGAGCACCTTCTCTGCCCCTTCTTGTCACACATCTATTAAATGCTTCTGTTTTCAAAAAAAAAAAAAAA
AAAAA

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FIGURE 2450

MDPPAEKPGEAGGLQITPQLLKSRGTGEFSLESILLKLRGLGLADLGCLGECLGLEWLDLSGNALHTLGPLASLR
QLAVLNVSNNRLTGLEPLATCENLQSLNAAGNLLATPGQLQCLAGLPCLEYLRRLRDPLARLSNPLCANPSYWAAV
RELLPGLKVIDGERVIGRGSEFYQLCRDLDSLRPSSSPGPRATEAQPWVEPGYWESWPSRSSSILEEACRQFQD
TLQECWDLDRQASDSLAQAEQVLSSAGPTSSFVF

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FIGURE 2451

GGCAGGCACCAGCTGGGGAAGGCTGGTGTTCCTTGTTCGGCCACATTCTGGAGCCCGGCAGACAGCCTCAGCAAG
CTCCTGTAGCCCTTCCAGATGGTGGTCCGCGAGGCGAGTGCGGCACAGGCCTCTCTGAGCCAGGTGCTGCCCCAG
CTGCGCTACCTGCACATCTTCTGGAGCAGGTTACACACACTTTTCAGGAGCAGAGTGTCTGGGGGAGAGGGGCGCA
GCCATCCAGCTGGCTGAGGGGTTGGCCCGGCAGCTCTGCACCGACTGTCTAGCTCAACAAGCTCTTCTACCGCGAG
GAGTTTGTGCTGGCCACCTTGTCTGGACCCCTTGCTTCAAGGGGAAGATTGAGGCCATCCTGCCATGGGGGCGGACC
GACATTGACCACTGGAAGCAAGTCTCGTGTACAAGGTGAAGGAGATTAGAGTGTCTGAATACTCTTTGAACTCC
CCAAGTCCCCTGCAAAGCCCCAGGGGTCTGTGCGTGGACCCACCAGGGTAGCCAAGAGCTCCGGGGTGGAGGGG
AGAAGCCAGGGGGAGCCTCTGCAGAGCAGCAGCCACTCTGGGGCCTTCTGCTGGCCAGAGGGGAGAAGGGCTTG
CTGGAGAGCATGGGGCTGCTGGCCTCTGAGAGAAGCGGGGGCTCGCTGTCCACCAAGAGCCACTGGGGCCAGCATC
ATTGTCAAGAAGTATCTGTGGGAGAATGAGACCGTTGGAGCCCAGGATGACCCCTGGCTTACTGGGAGAAGAAG
CGAGAAGCCTGGGCACCATCTATCTGTCTTACCCCCACAGGAGCCTTCTCTGAAGCATCTTTGCCTCCCTGAA
CAGCCCCACCCTTGTAGAGCAAACTCTTCTCTCAAGGTGGAAGCCATTGAGCATCTCTCTTCTTGAAGGCCAA
CCTGGAGCAGTTCCCCAACTACACCCCGCCTCCCCTCACTGCTCTAGTGGTGACCTGGCCAAGGGGATACAGAC
CCTGCAGTCCGCTCAGGGTGGGATGGCAGACATGGCAGGTGCCGGTGCTCACCCCTGCCCCGTGAACCTCTAGAGAG
CCCCTGCCTGTAATAGGTCAAAGCAGAGAGCTGGGTGTTGCATCCTGGGCGCCACATGCTCATGGCCAGAATCTT
AAACCTATTGGTAGGAAAGGGTCAGTTTCTCACTTGACAGATTGCCATATTTTTTTTCTGGGAGATGTCAATTT
TCCATCTCCCATTACTTCTTTACGTCTAGCAGTATGTGCCGAGAAGAGGGCTTACTCTCTTCGTAGGTGACTGT
GAATTTGTACTACGTGGCTTTGTACATGTGATGCTCTGTTAAACATAAGTGGGTATGAAGGTCCTTGCATACA
CCTTGTCTGTGTGGATAAGTGGACACATGCCCTTAAGAGGCTTGCTTTCTCAAAAAGTGGCCAAGGATGTGGAGT
GGGCATGTGCTGGCAGGTGGGATATGTCTCAGCCTTTGGGGGCTGGATAAGCTATTGCAGCACTTTCTGAGGC
TTTCACTGTAGGGAGAAGGAAACCCCAAGGGTAGAATAGCCATTTCCAGAGGGAAGTACACACATAACCCACAC
ACCAGTCTTTTGGGGGTTTCAGAGTGGCCGGAGAAACCGACTGAAGGGACTGACCAGCTAGCTAGGAGAGCTGA
GACGCCAGTCTCAAATGGCGTTCTTACCAATAGTCTATTTCCAGACTACTGGAACGTTGGGGTTTCTTCTCTCC
AGTGACAGCAGCCTCAGTAGCTTTCCTGGGCTCCAGGCGGCTGGCTGCACACCCTGCCTGCCATCACCCCTTGCCC
CTGCTTGTCTTGGACCACTTTTAAAGGGGAAGTCCCTTATTTGGAAGAGAGAAAGGATGTGTGTAGCACACACTC
ATCATGGATTGCTCAGAGTTCCTTTAGGGCAGAGCTGAGGGCCTGGGATCCAGGAACCAAGTGGGATTGGATGGGA
AGGGTGGCTGCTGAGATGCAGGTCGGAAGAGGCAGGGGAAGGCTCCAGGCCTAACTTGGAGCATGTCACTGGCCA
TGGGGGTGAGGGGACAGACTCTGCTCTCACTGGCTGGCAGCCCCAGGAGCCTGTTCCTTGCCTCTCTCTGGATGG
GTTGTGAGCCCTGTGTTTCACTGTGACCAATTCATTATAACATTTGGATATTACTGAAAATGTAAGGAAGCAGGA
AAAATTAACACTTTTCATTGAGAGATAGCCTCTATCAATAGTTTGACATTTTTCCCTCTTTTACATTGAGATCAT
ACCCTAGGTACTGTTTAGTATGCAATATTTTCATTTTCGCAGTATAATAATTGCACCTGTAAATAAAGTTTTGT
AAACATTTAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2452

MVVREASAAQASLSQVLPQLRYLHIFLEQVHTHFQEQSVGERGAAIQLAEGLARQLCTDCQLNKL FYREEFVLAT
LLDPCFKGKIEAILPWGPTDIDHWKQVLVYKVKEIRVSEYSLNSPSP LQSPRGLCVDPTRVAKSSGVEGRSQGEP
LQSSSHSGAFLLAQREKGLLESMGLLASERSGGSLSTKSHWASII VKKYLWENETVGAQDDPLAYWEKKREAWPP
SICLTPHRSL

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FIGURE 2453

CTTGAAATGTTATCTAAAAACCCAAGATTGAAATAATACATACCACACAAGGAAACAGGAGAGTAGTCTAGCTCC
ATGTCCGGGGCTCTAGGGGTTTCATAGATGGCAGCTCCTGTCCGGGGCTGAGGTTGGGAGGGGAGAAACAGGGGCA
GAGTGAGTTGGTCTCTGGAGTGACTGTGCTTTTCCACCCTCAGCAGAGGAAGAACCAGATGCTGGAACGTCGTTGC
AGGGGCCCCCTGGCCATGGGCCTGGCCCAGCCCCGACTCCTTTCTGGGCCCTCCCAGGAGTCACCCCAGACCCCTG
GGGAAGGAGTCCCGCGGGCTGAGGCAACAAGGCACGTCACTGGCCAGTCTGGTGCCCAAGCCCCAGGCAGGGCC
CATCGCTGTGCCACTGTCTGAAGGCACCTTCCCTGGCTGGGTGGCTCTGTGGCTTCACACCCGCCGGTGCCAGGCC
CGGCTGCCCTTGCCCTGCCCTGAGTGTGGCCGTGCTTTCCGCAATGCCCCCTTCTTAGCACTGCACCGCCAGGTC
CATGCTGCTGCCACCCAGACCTGGGCCTTGCCCTGCCACCTCTGTGGGCAGAGCTTCCGAGGCTGGGTGGCCCTG
GTTCTGCATCTGCGGGCCATTGAGCTGCAAAGCGGCCCATCGCTTGTCCCAAATGCGAGAGACGCTTCTGGCGA
CGAAAGCAGCTTCGAGCTCATCTGCGGCGGTGCCACCCCTCCCGCCCCGAGGCCCGGCCCTTCATATGCGGCAAC
TGTGGCCGGAGCTTTGCCAGTGGGACCAGCTAGTTGCCACACAAGCGGTGCACGTAGCTGAGGCCCTGGAGGAG
GCCCGAGCCAAGGCTCTGGGGCCCCGGCCCCAGGGGCCGCCCGCGGTGACCGCCCCCGGCCCGGTGGAGATGCC
GTCGACCGCCCCCTTCCAGTGTGCTGTTGTGGCAAGCGCTTCCGGCACAAAGCCCAACTTGATCGCTCACCGCCGC
GTGCACACGGGCGAGCGGCCCCACCAGTGCCCCGAGTGCGGGAAGCGCTTACCAATAAGCCCTATCTGACTTCG
CACCGGCGCATCCACACCGGCGAGAAGCCCTACCCGTGCAAAGAGTGCAGGCCGCCGCTTCCGGCACAAACCCAAC
CTGCTGTCTCACAGCAAGATTACAAAGCGATCCGAGGGGTGCGGCCAGGCCGCCCGGCCCGGGGAGCCCCCAG
CTGCCAGCCGGCCCCCAGGAGTCCGCGGCCGAGCCCACCCGGCGGTACCTCTGAAACCGGCCCAGGAGCCGCCG
CCAGGGGCCCGCCAGAGCACCCGAGGACCCGATCGAAGCCCCCCCCCTCCCTCTACAGCTGCGACGACTGCGGC
AGGAGCTTCCGGCTGGAGCGCTTCCCTGCGGGGCCACCAGCGGCAGCACACCGGGGAGCGGCCCTTCACTGCGCC
GAGTGCGGGAAGAATTCGGCAAGAAGACGCACCTGGTGGCGCACTCGCGCGTGCACCTCCGGCGAGCGGCCCTTC
GCCTGCGAGGAGTGCAGGCCGCCCTTCTCCAGGGCAGCCATCTGGCGGCGCATCGGCGGACACGCCCCCGAT
CGGCCCTTCGTGTGTCCCGACTGCGGCAAGGCCCTTCCGCCACAAACCTTACCTGGCGGCGCACCGGCGCATCCAC
ACCGGCGAGAAGCCCTACGTCTGCCCCGACTGCGGCAAGCCCTTACGCCAGAAGTCCAACCTGGTGTGCAACCGG
CGCATCCACACGGGCGAGCGGCCCTACGCCGTGTCGCGACTGCGACCGCAGCTTCAGCCAGAAGTCCAACCTCATC
ACCCACCGCAAGAGCCACATCCGGGACGGCGCCTTCTGCTGTGCCATCTGTGGCCAGACCTTCGACGACGAGGAG
AGACTCCTGGCCACCAGAAGAAGCACGATGTCTGAGACGGTGGGCGGGGCCGTGTTGGCTGAGAGAGGGCTGGG
GTCCTTCGTGGTGGGAGTCGCAGTGGGCTGGGGGTGCCTGCCTAGTGCTGGAGTAGGGGACAATGGGAATCCTAG
AGGGGATGGAAGACGCGGGGAGTGAGCTGGGTGGGCCCTGCTAGCGAGAGAGGTCAACCCCGGTGGCCAGGGAAC
CCACTTCCAAGCGCAGGGACGCCGGCCTCCAGCTGGTGTGTGCTAAGGCTCCGTCCTGACTGCCCTGTGCCCTGG
AAAAGCAGCAATAGCATCCGCCCTTAGAGCCCTCTGGCTAGAGGAGCCACCAGTGGAAGGAAGACCCCTCCATC
CTCTGGTATTAACGCCTTAATGCCCTGTCTTTTACTGTAAGTTACTTAAGATCATTTTTGGAAGCAGGCGTGGT
AGAGTCTGTAAATGAATGCTCTGGGCTAGATACAGCTTGGAGAACCCTGCTGGCCTTGTTAGACAGCAGCTTGGGC
CTTTGCCAGCAGCAAGAGGTGAAGCGAAGCCACTTACCTCTCCCTTCCCTTCCACCTGCCCTTGCCTAGGC
ACCCAGACTTGGAGAGACCCGTCTGCTGTTAATACTTCCATCCTCTTCCTTCCCAAAGAGCAGATCCCAAGGCAT
TTACTCCTTGGTCTGTCTCGCTTTATCTGTGCCCCCTCCCAGCGCTGAGAGCCTCCCTGGCTGTGACGAGCACT
GTGTCCAGGCTCTTGTCTGAACACCGCAGCCCCCTCTCGCTCCTTCCAGAGCTCAGCATGTACGGCAAGGACT
GCCGCATTGGTGATGGAGGGCCAGCTGAGGGGAAGTTGCTGGTGAGTTTCCCTTTTCTCCATTTCTAGCATATGGA
CACCTGGCCTCTGCTTGAGCATTAGGTGACAGGAACCTCCGCACCTCCTGAGGCCCTGGATGATTCTAATTGTT
AGAAATTCTAATTGTTAGAAATCCTTCCCTTATAATGAATGAATTCTGCTTTCTTATAATTTCTACCTATTGGGCC
TTGTTCTGTTCTCTGGAACATAACAGAACCAACATTTACCCCTCCTTTTCAAACCTAGAGAATAAAGATTTGGTTT
TAG

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FIGURE 2454A

GGGGAGCCGGGAGCCGAGCGAGGACCCGGCGCCCGCAGTCCAGTCTTGCCCGCGCCCGTGCTCGGCTTGCCCGCG
GGGTGCGGGGACCACGGCCCCGGCCGGGCCACCCGAAGCCTAGTGCTGGGCCGGGCCGGGGTGGGTGGGGG
CCCGCCCCGGCCCCGCCATGGGCTCAGGATGCCGGTGCGGAGGGGGCCACGTCGCGCCGCAGAACACCTTCCTGGAC
ACCATCATCCGCAAGTTTGTAGGGCCAGAGCCGTAAGTTCATCATCGCCAACGCTCGGGTGAGAACTGCGCCGTC
ATCTACTGCAACGACGGCTTCTGCGAGCTGTGCGGCTACTCGCGGGCCGAGGTGATGCAGCGACCCTGCACCTGC
GACTTCCTGCACGGGCCGCGCACGCGCGCGCTGCCGCGCAGATCGCGCAGGCACTGCTGGGCGCCGAGGAG
CGCAAAGTGGAATCGCCTTCTACCGGAAAGATGGGAGCTGCTTCCTATGCTCTGGTGATGTGGTGCCCGTGAAG
AACGAGGATGGGGCTGTTCATCATGTTTCATCCTCAATTTCGAGGTGGTGATGGAGAAGGACATGGTGGGGTCCCCG
GCTCATGACACCAACCACCGGGGCCCCCACCAGCTGGCTGGCCCCAGGCCGCGCCAAGACCTTCGCGCTGAAG
CTGCCCGCGCTGCTGGCGCTGACGGCCCGGGAGTCGTGGTGCGGTCGGGCGGCGGGGCGGCGGGGCGCCCCG
GGGGCCGTGGTGTTGGTGGACGTGGACCTGACGCGCGCGGCACCCAGCAGCGAGTCGCTGGCCCTGGACGAAGTGACA
GCCATGGACAACCACGTGGCAGGGCTCGGGCCCGCGGAGGAGCGGCGTGCGCTGGTGGGTCCCGGCTCTCCGCCC
CGCAGCGCGCCCGGCCAGCTCCCATCGCCCCGGGCGCACAGCCTCAACCCCGACGCTCGGGCTCCAGCTGCAGC
CTGGCCCGGACGCGCTCCCGAGAAAGCTGCGCCAGCGTGCGCCGCGCCTCGTCGGCCGACGACATCGAGGCCATG
CGCGCCGGGTGCTGCCCCCGCCACCGCGCCACGCCAGCACCGGGGCCATGCACCCACTGCGCAGCGGCTTGCTC
AACTCCACCTCGGACTCCGACCTCGTGCGCTACCGCACCATTAGCAAGATTCCCCAAATCACCTCAACTTTGTG
GACCTCAAGGGCGACCCCTTCTTGCTTCGCCCACCAGTGACCGTGAGATCATAGCACCTAAGATAAAGGAGCGA
ACCCACAATGTCACTGAGAAGGTACCCAGGTCTGTCCCTGGGCGCCGACGTGCTGCCTGAGTACAAGCTGCAG
GCACCGCGCATCCACCGCTGGACCATCTGCATTACAGCCCCCTCAAGGCCGTGTGGGACTGGCTCATCTGCTG
CTGGTCACTACACGGCTGTCTTACACCCTACTCGGCTGCCTTCCTGCTGAAGGAGACGGAAGAAGGCCCGCCT
GCTACCGAGTGTGGCTACGCTGCCAGCCGTGGCTGTGGTGACCTCATCGTGACATCATGTTCAATTGTGGAC
ATCCTCATCAACTTCGCGACCACCTACGTCAATGCCAACGAGGAGGTGGTCAGCCACCCCGCCGCATCGCCGTC
CACTACTTCAAGGGCTGGTTCTCATCGACATGGTGCCGCCATCCCCCTCGACCTGCTCATCTTCGGCTCTGGC
TCTGAGGAGCTGATCGGGCTGCTGAAGACTGCGCGGCTGCTGCGGCTGGTGCGCGTGCGCGGAAGCTGGATCGC
TACTCAGAGTACGGCGCGGCCGTGCTGTTCTTGCTCATGTGCACCTTTGCGCTCATCGCGCACTGGCTAGCCTGC
ATCTGGTACGCCATCGGCAACATGGAGCAGCCACACATGGACTCACGCATCGGCTGGCTGCACACGGGCGAC
CAGATAGGCAAACCTACAACAGCAGCGGCTGGGCGGCCCTCCATCAAGGACAAGTATGATGACGGCGCTCTAC
TTCACCTTCAGCAGCCTACCAAGTGTGGGCTTCGGCAACGCTCTCTCCCAACACCACTCAGAGAAGATCTTCTCC
ATCTGCGTCATGCTCATTGGCTCCCTCATGTATGCTACGATCTTCGGCAACGCTGTCGGCCATCATCCAGCGGCTG
TACTCGGGCACAGCCCGCTACCAACACAGATGCTGCGGGTGCGGGAGTTTCATCCGCTTCCACCAGATCCCCAAT
CCCCTGCGCCAGCGCCTCGAGGAGTACTTCCAGCACGCTGGTCTTACACCAACGGCATCGACATGAACCGGGTG
CTGAAGGGCTTCCCTGAGTGCTGCAGGCTGACATCTGCCTGCACCTGAACCGCTCACTGCTGCAGCACTGCAAA
CCCTTCCGAGGGGGCCACCAAGGGCTGCCTTCGGGCCCTGGCCATGAAGTTCAAGACCACACATGCACCGCCAGGG
GACACACTGGTGATGCTGGGGACCTGCTCACCGCCCTGTACTTCATCTCCCGGGGCTCCATCGAGATCCTGCGG
GGCGACGTGCTGCTGGCCATCCTGGGGAAGAATGACATCTTTGGGGAGCCTCTGAACCTGTATGCAAGGCCTGGC
AAGTCGAACGGGGATGTGCGGGCCCTCACCTACTGTGACCTACACAAGATCCATCGGGACGACCTGCTGGAGGTG
CTGGACATGTACCCTGAGTTCTCCGACCACTTCTGGTCCAGCCTGGAGATCACCTTCAACCTGCGAGATACCAAC
ATGATCCCGGGCTCCCCCGGCAGTACGGAGTTAGAGGGTGGCTTCACTCGGCAACGCAAGCGCAAGTTGTCTTC
CGCAGGCGCACGGACAAGGACACGGAGCAGCCAGGGGAGGTGTGCGCCTTGGGGCCGGGCCGGGGGCGAGGG
CCGAGTAGCCGGGGCCGGCCGGGGGGGCGTGGGGGAGAGCCCGTCCAGTGCGCCCTCCAGCCCTGAGAGCAGT
GAGGATGAGGGCCAGGCCGAGCTCCAGCCCCCTCCGCTGGTGCCCTTCTCCAGCCCCAGGCCCCCCGGAGAG
CCGCCGGGTGGGGAGCCCTGATGGAGGACTGCGAGAAGAGCAGCGACACTTGCAACCCCTGTGAGGCGCCTTC
TCAGGAGTGTCCAACATTTTCAGCTTCTGGGGGACAGTCGGGGCCGCCAGTACCAGGAGCTCCCTCGATGCCCC
GCCCCACCCCCAGCCTCCTCAACATCCCCCTCTCCAGCCCGGGTGGCGGGCCCCGGGGCGACGTGGAGAGCAGG
CTGGATGCCCTCCAGCGCCAGCTCAACAGGCTGGAGACCCGGCTGAGTGCAGACATGGCCACTGTCTGCGAGCTG
CTACAGAGGCAGATGACGCTGGTCCCGCCCGCTACAGTGTGTGACCACCCCGGGGCTGGCCCCACTTCCACA
TCCCCGCTGTTGCCCGTCAGCCCCCTCCCCACCTCACCTTGGACTCGCTTTCTCAGGTTTCCAGTTTCATGGCG
TGTGAGGAGCTGCCCCCGGGGGCCCCAGAGCTTCCCCAAGAAGGCCCCACACGACGCCTCTCCCTACCGGGCCAG

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FIGURE 2454B

CTGGGGGCCCTCACCTCCCAGCCCCTGCACAGACACGGCTCGGACCCGGGCAGTTAGTGGGGCTGCCCAGTGTGG
ACACGTGGCTCACCAGGGATCAAGGCGCTGCTGGGCGCTCCCCCTTGGAGGCCCTGCTCAGGAGGCCCTGACCG
TGGAAGGGGAGAGGAACTCGAAAGCACAGCTCCTCCCCAGCCCCTTGGGACCATCTTCTCCTGCAGTCCCCTGGG
CCCCAGTGAGAGGGGCAGGGGCAGGGCCGGCAGTAGGTGGGGCCTGTGGTCCCCCCTGCCCCTGAGGGCATTAG
CTGGTCTAACTGCCCGGAGGCACCCGGCCCCTGGGCCTTAGGCACCTCAAGGACTTTTCTGCTATTTACTGCTCTT
ATTGTTAAGGATAATAATTAAGGATCATATGAATAATTAATGAAGATGCTGATGACTATGAATAATAAATAATTA
TCCTGAGGAGA

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FIGURE 2455A

AGTCCAGAGCGAGCGGGTTATGCCTCCGCCTCGTTGCCCTGAAAGCCGCAGCGACAGCGAAAAGGGCTAAGATTC
GGCCATGAGCAGCGCCCCTCGGCGCCCCGCCAAGGGCGCAGATTCTTTCTGTACGCCAGAGCCAGAGAGCTTGGG
CCCTGGGACGCCTGGGTTCCCCGAGCAGGAGGAAGACGAACCTTACC CGACCCCTGGGCGTGGAGCGGTTTGAGGA
GATCCTACAGGAGGCCGGGTCTCGTGGAGGGGAGGAGCCAGGCCGCAGCTATGGGGAGGAAGACTTTGAGTACCA
CCGCCAGTCTCCACCACATCCATCACCACCTGTCCACCCACCTGCCCTCCGGATGCACGCCGCCGCAAGACACC
CCAGGGCCCAGGACGGAAGCCTCGAAGGCGCCCGGGAGCCTCCCCGACTGGAGAAAACCCCGACCATTGAGGAGGG
GGAGGAAGATGAGGATGAGGCCAGCGAGGCTGAGGGGGGCCCGGGCTCTCACTCAGCCGTCCCTGTCTCCACACC
CTCCTCGGTGCAGTTCTTTCTCCAAGAGGATGACAGTGCTGACCGGAAGGCAGAGAGGACCAGTCCATCTTCCCC
TGCACCACTGCCCCACCAGGAGGCGACTCCTCGGGCCTCCAAAGGGGCCAGGCTGGAAACCCAGGTGGAGGAGGC
GGAGGCGGAGGCGGTGGCGGTGGCCAGTGGCACTGCAGGGGGTGACGACGGGGGTGCCTCGGGGCGCCCCCTGCC
CAAAGCCCAGCCTGGGCACCGCAGCTACAACCTTCAGGAGAGGAGGCGCATCGGGAGCATGACTGGGGCTGAGCA
GGCACTGCTGCCCCGGGTCCCCACGGATGAGATTGAGGCCAGACGCTGGCCACGGCCGACCTAGACCTCATGAA
GAGTCAACGGTTTGAGGACGTTCTCGGGGTGCGGCGGCACTTGGTGCGGAAGAATGCCAAAGGTTCCACACAGAG
TGGCCGAGAAGGGCGGGAGCCTGGCCCCACACCTCGGGCCCGACCCCGGGCCCCCAAGCCCCATGAGGTGTT
TGTGGAGCTGAATGAGTTGCTCCTGGACAAAACCAGGAGCCCCAGTGCGGGGAGACAGCTCGCTGGATCAAATT
TGAAGAGGACGTGGAGGAGGAGACTGAGCGCTGGGGGAAGCCCCACGTGGCCTCCCTCTCCTTCCGCAGTCTCCT
GGAGCTCCGCAGGACCTTGGCCCATGGGGCTGTGCTCTTGGATCTGGACCAGCAGACCTGCCCGGAGTGGCCCA
CCAGGTGGTGGAGCAGATGGTCATCTCTGACCAGATCAAGGCCGAGGACAGGGCCAACGTGCTGCGGGCTCTGCT
GTTGAAACACAGCCACCCAAGTGATGAGAAGGACTTCTCCTTCCCCCGCAACATCTCAGCTGGCTCCCTGGGCTC
CCTGCTGGGGCATCACCATGGTCAGGGGGCTGAGAGTGACCCCACTCACCGAGCCTCTCATGGGAGGTGTTCC
TGAGACCCGGCTGGAGGTGGAGCGAGAGCGTGAGCTGCCGCTCCAGCACCACCAGCTGGCATCACCCGCTCCAA
GTCCAAGCACGAGCTGAACTGCTGGAGAAGATTCTTGAGAATGCCGAGGCCACGGTGGTCTTGTGGGCTGCGT
GGAGTTCTCTCCCGCCCCACCATGGCCTTTGTGCGGCTCCGGGAGGCTGTGGAGTTGGACGCAGTGTGGAGGT
GCCGTGCTGTGCGTTTCTCTCTCTGCTGCTGGGCCCCAGTAGTGCCAACATGGACTACCACGAGATCGGCCG
CTCCATCTCCACCTCATGTCTAGACAAGCAATTCCACGAGGCGACCTACCTGGCTGACGAGCGGGAGGACCTGCT
GACGGCCATCAACGCCTTCTTGACTGCAGCGTGGTGCTGCCGCTTCAGAAGTGACGGGCGAGGAGCTGCTGCG
CTCTGTGGCCCACTTCCAGCGCCAGATGCTCAAGAAGCGAGAGGAGCAGGGCCGGCTGCTACCTACAGGGGCTGG
GCTGGAGCCCAATCTGCCAAGATAAGGCGCTCCTGCAGATGGTAGAGGCGGCAGGGGCGAGCTGAAGATGATCC
CCTTCGGGCGGACGGGCGGGCCCTTTGGGGGGCTGATCCGAGATGTGCGGCGCCGCTATCCCCACTGCTGAGTGA
CTTCCGAGATGCACCTTGACCCTCAGTGCTGGCCGCGAGTCATCTTCACTACTTTGCCGCCCTGTCTCTGCCAT
CACCTTTGGGGGGCTGCTGGGAGAGAAGACGAGACCTGATAGGGGTGTCGGAGCTGATTATGTCCACAGCGCT
CCAGGGCGTGGTCTTCTGCTGCTGGGTGCCACGCCCTGTTGGTGATCGGCTTCTCAGGGCCCCCTGCTGGTCTT
TGAGGAGGCCCTTCTTCTCGTTCTGTAGCAGCAACCACCTGGAGTACCTGGTGGGCCGTGTGTGGATCGGCTTCTG
GCTGGTGTCTTCTGGCCCTGCTCATGGTGGCCCTGGAGGGGAGCTTCCTGGTCCGCTTCGTCTCCCGCTTACCCA
GGAGATCTTCGCCCTTCTGATCTCACTCATCTTCACTATGAGACCTTCTACAAGCTGGTGAAGATCTTCCAGGA
GCACCCCTGCGATGGCTGCTCAGCCTCCAACAGCTCAGAGGTGGACGGCGGTGAGAACATGACATGGGCCGGGGC
AAGACCCACGCTGGGGCCGGGCAACAGGAGCTTGGCTGGGCAGTCTGGGCAGGGGAAGCCCCGGGGCCAGCCAA
CACGGCCCTGCTGTGCTGGTGTCTATGGCCGGCACCTTCTTTCATCGCCTTCTTCTGCGCAAATTCAAGAACAG
CCGTTTCTTCTTCTGGCCGATCCGGCGGGTGATTGGGGACTTTGGGGTGCCCATCGCCATCCTCATATGGTGTCT
TGTGGATTACAGTATTGAGGACACCTATACCCAGAAGCTGAGCGTTCCAGTGGAATCTCGGTGACTGCCCCAGA
AAAGAGGGGCTGGGTCTATCAACCCCTGGGAGAGAAGAGCCCCCTTCCCTGTGTGGATGATGGTTGCCAGCCTGCT
GCCCGCCATCCTGGTCTTCTATTCTCATCTTCTATGGAGACACAGATCACCACGCTCATCATCTCCAAGAAGGAGCG
CATGCTGCAGAAGGGCTCCGGCTTCCACCTGGACCTGCTGCTCATCGTGGCCATGGGCGGCATCTGTGCCCTCTT
TGGCCTGCCCTGGTTGGCTGCTGCCACTGTCCGCTCTGTCACTCACGCCAACGCGCTCACTGTCTATGAGCAAGGC
TGTGGCACTGGGGACAAGCCCAAGATTCAAGGAAGTCAAGGAGCAGCGGGTGACGGGGCTGCTGGTTGCCCTGCT
TGTGGGCTCTCCATAGTTATCGGGATCTGCTCCGGCAGATCCCCCTGGCCGTGCTCTTTGGAATTTTCTGTGA
CATGGGAGTCACTCCCTTAACGGGATCCAGTTCTATGAGCGGCTGCATCTGCTGCTCATGCCGCCAAACACCA
CCCAGATGTCACTTACGTCAAGAAGGTCCGGACCTCCGTATGCACCTGTTTACGGCCCTGCAGCTGCTCTGCCT

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FIGURE 2455B

GGCCCTGCTCTGGGCCGTCATGTCCACAGCTGCCTCCCTGGCCCTTCCCTTCATCCTCATCCTCACAGTGCCGCT
CCGCATGGTGGTGCTCACCCGTATCTTCACCGACCGAGAGATGAAATGTCTGGATGCTAACGAGGCAGAGCCGGT
GTTTGATGAGCGGGAGGGTGTGGACGAGTACAATGAGATGCCCCATGCCTGTGTAGCCGCCACCGAGGGACAGCCG
AGGGACCGATGGACGAGGGGACAGGCTGGTGGGATGGGGTTCCCCCTCCCATGCCCCCTCCCTCCTTTTTATTAA
GTGAATAATTTAAAGTCTTCTCCTCCCCACTGCCCTGCAGTAAAGTGCTTTGGCCCCCA

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FIGURE 2456

GCGGCGGCGGGGAAGGAGGGGTGCTTCAGGTGCCTGCGACCTCCGCGCCTCCCGCCCGGAAGTGCCCGAGGGGCC
GCGATGGAGCTGGGGGAGCCGGGCGCTCGGTAGCGCGGCGGGCAAGGCAGGCGCCATGACCCCTGATTGAAGGGGT
GGGTGATGAGGTGACCGTCCTTTTCTCGGTGCTTGCCCTGCTTCTGGTGCTGGCCCTTGCCCTGGGTCTCAACGCA
CACCGCTGAGGGCGGGGACCCACTGCCCCAGCCGTGAGGACCCCAACGCCATCCCAGCCCAGCGCAGCCATGGC
AGCTACCGACAGCATGAGAGGGGAGGCCCCAGGGGCAGAGACCCCAAGCCTGAGACACAGAGGTCAAGCTGCACA
GCCAGAGCCCAGCACGGGGTTACAGCAACACCGCCAGCCCCGGACTCCCCGCAGGAGCCCCCTCGTGCTACGGCT
GAAATTCTCAATGATTAGAGCAGGTGGCCAGGGCCTGGCCCCACGACACCATTTGGCTCCTTGAAAAGGACCCA
GTTTCCCGGCCGGAACAGCAGGTGCGACTCATCTACCAAGGGCAGCTGCTAGGCGACGACACCCAGACCCTGGG
CAGCCTTACCTCCCTCCCAACTGCGTTCTCCACTGCCACGTGTCCACGAGAGTCGGTCCCCCAAATCCCCCCTG
CCCGCCGGGGTCCGAGCCCGGGCCCTCCGGGCTGGAAATCGGCAGCCTGCTGCTGCCCTGCTGCTCTGCTGTT
GCTGCTGCTCTGGTACTGCCAGATCCAGTACCGGCCCTTCTTTCCCTGACCGCCACTCTGGGCCTGGCCGGCTT
CACCTGCTCCTCAGTCTCCTGGCCTTTGCCATGTACCGCCCGTAGTGCCTCCGCGGGCGCTTGGCAGCGTCGCC
GGCCCTCCGGACCTTGCTCCCCGCGCCGCGGCGGGAGCTGCTGCCTGCCAGGCCCGCCTCTCCGGCCTGCCTC
TTCCCGCCGCCCTGGAGCCCAGCCCTGCGCCGAGAGGACTCCCGGGACTGGCGGAGGCCCGCCCTGCGACCGC
CGGGGCTCGGGGCCACCTCCCGGGGCTGCTGACCCTCAGCCCGCACTGGGAGTGGGCTCCTCGGGGTGGGCATC
TGCTGTGCTGCTCGCTCGGCCCGGGCAGAGCCGGGCGCCCCGGGGGCCCGTCTTAGTGTTCTGCCGGAGGACCA
GCCGCTCCAATCCCTGACAGCTCCTTGGGCTGAGTTGGGGACGCCAGGTGGTGGGAGGCTGGTGAAGGGGAGC
GGGGAGGGGCAGAGGAGTTCCCCGGAACCGTGAGATTAAAGTAACTGTGAAGTTTTCAAAAAAAAAAAAAA

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FIGURE 2457

MTLIEGVGDEVTVLFSVLACLLVLALAWVSTHTAEGGDPLPQPSTPTPSQPSAAMAATDSMRGEAPGAETPSLR
HRGQAAQPEPSTGFTATPPAPDSPQEPLVLRLKFLNDSEQVARAWPHDTIGSLKRTQFFGREQQVRLIYQGQLLG
DDTQTLGSLHLPPNCVLHCHVSTRVGPPNPCCPPGSEPGPSGLEIGSILLPLLLLLLLLLLLWYCQIQYRPFFPLTA
TLGLAGFTLLLSLLAFAMYRP

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CCGAGTCCCTGAAACAACAGTAACCTACCCCTGTGGGTTCATCATCATGCCCTCCGACCTGGCCAAAGAAGAAGG
AGCCAAAAAGAAGGAGGCTGCCAAAGCTCGACAGCGGCCAGAAAAGGACATGAAGAAAATGGAGATGTTGTCAC
AGAACCACAGGTGGCAGAGAAGAATGAGGCCAATGGCAGAGAGACCACAGAAGTAGATTGCTGACCAAGGAGCT
AGAGGACTTTGAGATGAAGAAAGCTGCTGCTCGAGCTGTCACTGGCGTCTTGGCCTCTCACCCCAACGTA
TGTTCACATCATCAACCTCTCACTCACCTTTTCATGGTCAAGAGCTGCTCAGTGACACAACTGGAATTA
AGGCCGTCGTTATGGCCTCATTGGTTTTAAATGGAATTGGAAAGTCCATGCTGCTCTCTGCTATTGGGAAGCGTGA
AGTGCCCATCCCTGAGCACATCGACATCTACCATCTGACTCGAGAGATGCCCCCTAGTGACAAGACACCCTTGCA
TTGTGTGATGGAAGTCGACACAGAGCGGGCCATGCTGGAGAAAAGGCGAGAGCGGCTGGCTCATGAGGATGCGGA
GTGTGAGAAGCTCATGGAGCTCTACGAGCGCCTGGAGGAGCTGGATGCCGACAAGGCAGAGATGAGGGCCTCGCG
GATCTTGATGGACTGGGTTTTACACCTGCCATGCAGCGCAAGAAGCTAAAAGACTTCAGTGGGGGCTGGAGGAT
GAGGGTTGCCCTTGCCAGAGCCCTCTTTATTCGGCCCTTCATGCTGCTCCTGGATGAGCCTACCAACCACCTGGA
CCTAGATGCTTGCGTGTGGTTGGAAGAAGAACTAAAAACTTTTAAGCGCATCTTGGTCCTCGCTCTCCCATTC
GGATTTTCTGAATGGTGTCTGTACCAATATCATTACATGCACAACAAGAACTGAAGTATTATACGGGTAATTA
TGATCAGTATGTGAAGACGCGGCTAGAGCTGGAGGAGAACCAGATGAAGAGGTTTCACTGGGAGCAAGATCAGAT
TGCACACATGAAGAACTACATTGCGAGGTTTGGTTCATGGCAGTGCCAAGCTGGCCCGGCAGGCCCCAGAGCAAGGA
GAAGACGCTACAGAAAATGATGGCATCAGGACTGACAGAGAGGGTCGTGAGCGATAAGACACTGTCATTTTATTT
CCCACCATGTGGCAAGATCCCTCCACCTGTCATTATGGTGCAAAATGTGAGCTTCAAGTATACAAAAGATGGGCC
TTGCATCTACAATAATCTAGAATTTGGAATTGACCTTGACACACGAGTGGCTCTGGTAGGGGCCAATGGAGCAGG
GAAGTCAACTCTTCTGAAGCTGCTAACTGGAGAGCTACTACCCACAGATGGCATGATCCGAAAACACTCTCATGT
CAAGATAGGGCGTTACCATCAGCATTTACAAGAGCAGCTGGACTTAGATCTCTCACCTTTGGAGTACATGATGA
GTGCTACCCAGAGATCAAGGAGAAGGAAGAAATGAGGAAGATCATTGGGCGATACGGTCTCACTGGGAAACAACA
GGTGAGCCCAATCCGGAACCTGTGACAGCGGCAGAAAGTGCCGAGTGTGCTTGGCCTGGCTGGCCTGGCAGAACCC
CCACATGCTCTTCTGGATGAACCCACCAATCACCTGGATATCGAGACCATCGACGCCCTGGCAGATGCCATCAA
TGAGTTTGAGGGTGGTATGATGCTGGTCAGCCATGACTTCAGACTCATTTCAGCAGGTTGCACAGGAAATTTGGST
CTGTGAGAAGCAGACAATCACCAAGTGGCCTGGAGACATCCTGGCTTACAAGGAGCACCTCAAGTCCAAGCTGGT
GGATGAGGAGCCCCAGCTCACCAAGAGGACCCACAACGTGTGCAACCTGACATTGGCATCTCTGCCAAGGCCATG
AGCATCATGAACTCGTTTGTAAACGACGTGTTTGAGCAGCTGGCGTGTGAGGCTGCCCGGCTGGCCAGTACTCG
GCCCGGACCACCTTGACATCCCGAGAAGTCCAGACGGCTGTGCGTCTGCTGCTGCTGCCCTGGGGAGCTGGCCAAGCAC
GCTGTGCTGAGGGGACCAAGGCTGTACCAAGTACACCAGCTCCAAGTGACCCAGGGCCTGACAAAAATAAAGG
GTGAACCTGTTAAAAA

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FIGURE 2459

MPSDLAKKKAAKKKEAAKARQRPRKGHEENGDVVTEPQVAEKNEANGRETTEVDLLTKELEDFEMKKAAARAVTG
VLASHPNSTDVHIINLSLTFHGQELLSDTKLELNSGRRYGLIGLNGIGKSMLLSAIGKREVPPIPEHIDIYHLTRE
MPPSDKTPLHCVMEVDTERAMLEKEAERLAHEDAECEKLMELYERLEELDADKAEMRASRIHGLGFTPAMQRKK
LKDFSGGWRMRVALARALFIRPFMLLLDEPTNHLDDLACVWLEEEELKTFKRILVLVSHSQDFLNGVCTNIIHMHN
KKLKYYTGNYDQYVKTRLELEENQMKRFHWEQDQIAHMKNYIARFGHGSAKLARQAQSKEKTIQKMMASGLTERV
VSDKTILSFYFPPCGKIPPPVIMVQNVSFKYTKDGPCIYNNLEFGIDLDTRVALVGPNGAGKSTLLKLLTGELLPT
DGMIRKHSVKGIRYHQHLQEQLDLDLSPLEYMMKCYPEIKEKEEMRKIIIGRYGLTGKQQVSPIRNLSDGQKCRV
CLAWLAWQNPMLFLDEPTNHLDIETIDALADAINFEFGMMLVSHDFRLIQQVAQEIWVCEKQTITKWPGDILA
YKEHLKSKLVDEEPQLTKRTHNVCTLTLASLPRP

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FIGURE 2460

GCCTAATTAAAGGCGGCGGAAGAAGGTGGGAGGGTCATGACGCAGCGAGTTTCAGTCGTGACTTTTCTGGGGGC
ATCGCGGCGTCCCTTTTTTTTTGCTTTTAAAGTAAAACGTCGCCCCGACGCACCCCCGCGTATTTCTGGGGGGCG
GAGGCGGCGGGCCACGGCGCGAAGAGGGGCGGTGCTGACGCCGGCCGGTCACGTGGGCGTGTGTGGGGGGGAGG
GGCGCCGCGCGCGGTTCGGGGCGGTTGGGAGCGCGCGAGCTAGCGAGCGAGAGGCAGCCGCGCCCGCCGCG
CGCCCTGCTCTGTATGCCGCTCTCTCCGGCGCGGGCCGCCGCCGATCACAGCAGCAGGAGCCACCGCCGCGCG
GTTGATGTGGTTGGGCCGGGGCTGAGGAGGCCGCCAAGATGCCGCGAGTCCAAGTCCCGGAAGATCGCGATCCTGG
GCTACCGGTCTGTGGGGAAATCCTCATTGACGATTCAATTTGTTGAAGGCCAATTTGTGGACTCCTACGATCCAA
CCATAGAAAACACTTTTACAAAGTTGATCACAGTAAATGGACAAGAATATCATCTTCAACTTGTAGACACAGCCG
GGCAAGATGAATATCTATCTTTCTCAGACATACTCCATAGATATTAATGGCTATATTCTTGTGTATTCTGTTA
CATCAATCAAAAGTTTTGAAGTGATTAAAGTTATCCATGGCAAATTGTTGGATATGGTGGGGAAAGTACAAATAC
CTATTATGTTGGTTGGGAATAAGAAAGACCTGCATATGGAAAGGGTGATCAGTTATGAAGAAGGGAAAGCTTTGG
CAGAAICTTGGAATGCAGCTTTTTTGGAACTCTCTGCTAAAGAAAATCAGACTGCTGTGGATGTTTTTCGAAGGA
TAATTTTGGAGGCAGAAAAATGGACGGGGCAGCTTCACAAGGCAAGTCTTCATGCTCGGTGATGTGATTCTGCT
GCAAAGCCTGAGGACACTGGGAATATATTCTACCTGAAGAAGCAAAC TGCCCGTTCTCCTTGAAGATAAACTATG
CTTCTTTTTTCTTCTGTAACTGAAAGATATCATTGCGGTGAGAGCTCCCTCCCTTCAAGATTATGTTAACTCT
GAGTCTGTCCAAATGAGTTCACTTCCATTTTCAAATTTTAAGCAATCATATTTCAATTTATATATTGTATTCT
TAATATTATGACCAAGAATTTTATCGGCATTAAATTTTCAGTGTAGTTTGTGTTAAAAATAATGTAATCATCAA
AATGATGCATATTGTTACTACTATTAAGGCTTCAGTATATCAGTGTATTATTTCAATTGTGTTAAATGTATA
CTTGTAATAAAATAGCTGCAAACCTCAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2461

MPQSKSRKIAILGYRSVGKSSLTIQFVEGQFVDSYDPTIENTFTKLITVNGQEYHLQLVDTAGQDEYSIFPQTYS
IDINGYILVYSVTSIKSFEVIKVIHGKLLDMVGKVQIPIMLVGNKKDLHMERVISYEEGKALAESWNAAFLESSA
KENQTAVDVFRRIILEAEKMDGAASQGKSSCSVM

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FIGURE 2462A

GATTTACTTGGAGAAGATTGCTATCTGGCAAAAAGAATCAGTCGGATTGTCAGATGAAGAGCTAAATGATGAT
CTTTTGCAGAGTGATAATGAAGATGAAGAAAATTTTCAGTTCTCAGGGTGTTACAATTAGTCTGAATGCTACATCT
GGCATGGTTACATCATTGAACTCTCTGACAACACTAACGACCAATCTGGAGAACAGGAATCTGAGTATGAACAA
GAACAAGGAGAGGATGAAGTGGTTTATCACAATCTGATGGATCAGAATTGTATACTCAAGAGTACCCAGAAGAA
GGACAGTATGAAGGCCACGAAGCTGAGTTGACAGAAGACCAATAGAATATGTGGAAGAGCCAGAGGAGGAGCAG
CTTTACACTGATGAAGTGTAGACATCGAGATCAATGAACCTTTAGATGAATTTACAGGAGGTATGGAAACATTG
GAACTTCAAAAGGACATCAAAGAAGAATCAGATGAAGAAGAAGAGATGATGAAGAATCTGGACGATTACGTTTC
AAAACCTGAAAGGAAAGAAGGAACAATTATTAGGCTCTCAGATGTAAGTAGAGAGAGAAGGAACATTCCAGAACT
TTGGAGCTTTTCAGCAGAGGGCCAAGGCAGCATTGCTTGAATTTGAAGAAAGGGAGCGACAGCATAAACAAGGACGC
TACAGCTCCAGGCGGGGAGGACGGCGAGGAGTCCGCTGATGTGTCGTGGTGTGGGGGACCAGAGGAGAGAGAGC
ACCGAGAGGGGACAGGATGAAGGACCACAGACCTGCGCTGCTTCCACACAGCCTCCTGTCTGTGATACTTCCAGAG
GAGGAATTAATGAGCGACCTGATGCCCTAAGATGACATAAGCTGTTGGACCTTGCTACCTAAAGCCTCTAGAGAG
CCCCAGGCTCCCCCTCCACCGCTCCGCCGCTCAGCAGCAGCCGATCAGAAGCCTGTTCCAGCCGACGCCGCTG
CAGCCGCTGCTTCCGGTGCAGCACCCGCCACCCATCCCCGCTCAGGGAATGCACATGCCTCCCCAGCTAGAG
ACCCCAAGGATGATGATGACCCCGCCACCCGTGACTCCACAGCAGCCCAAGAACATACACATCAACCCGCACTTC
AAAGGGACGGTGGTCACGCCTGTTCAAGTGCCCTTGCTACCAAGTTCAGGCCAGCCGAGACCTGCCGTGGGACCC
CAGAGATTCCCAGGCCCTCCAGAATTTCCACAGCATAACCTGGACCTGTTCCCAACAGTTTCAGCCAGCCCCCA
CGACTCCCTCTCCAGGACCACTGGAGAGCCCCACCCCGCTCAGGATCGAGACCCCTTCTTCTTAGGAGTTTCA
GGTGAACCAAGATTCCCAGCCATCTTTTTCTGGAACAGCGAAGTCCCCCTCCACCACCACCGCTCCTACCCCTT
CTTAACAGTAGCCATCTGTCTCTACTCAGAGTCTCTACCATTCAGCCAGGACCAGCATTTAATCAGCAA
GGACAGCAGCCAGTGTTCCTCAAGAGAGCGGCCGTACGACCAGCCTTGACGCTCCAGGTCCGGTGGGGATTCTG
CACTTTAGCCAGCCTGGGTGCGCAACCACAGGCCCTTCACTCTCTAGACAGCCGTTCCTGCCAGGCCAGGA
CAGCCGTTTCTGCCCACACACACAGCCCAACCTGCAGGTAATGCATCCTGAGTGAACCTCCAGGGAAAAATG
TGAGCTTCAAGGCTTTGTGTTCATAAAGTTTCAGATTTTTTATTTGAGCCTACTAATTTGTGGTTATTTAAAGA
ATAGAGTATTAGTCTCAAATGTACTGTTTGTAAAGACAACTTTTTCAACAATGTTACTTATCTCAATACAAGA
AAAAAATGGGAAAAATGTCATTTTTTGGGAATTGAAAAATGCTACTTATTATAATTGTTTAAAGGGTATACTACTA
ATAAAAATTAGGACATGTTTTGATAATACATTTGCTCATCTGTATAAAAATTTCAATGAGAGGTTTACCAGTGGAAAT
ACTTTGTCAAATTATATTCTCTGCAGTAGACAGTTTTGAAAAGAGTCTTTGCATGGAGGGAAGAAGATGTTGCTGT
TCACITGGTTATTTGAAGGCCTTGAGTGCCCTCTGCCGACCGGCTTCTGCTTCATGGGTTTTCACTGGTTATTTGA
AGGCCTTGAGTGCCCTCTGCCCATCGGCTTCTGCTTCATGGGTTGACATGCGTCTGTAACATCTTTCTTACCAAG
TGTATATTTCTTCTTGTATTGTAGGGTTACTATTAAAAATACATAGCGATGGTAACTTGAATCAACTATTTAAAA
ATACGTGGAATACGTATCTAAGCCAAAAACGGAAAAATGAATATTATCTAGGGTGTAAAGGAAGATAAAATGTTT
TTAAGAATTTTTCTTTTTTATTAATAAAAAATGCAATTAATACATCCCCATTGCAGAAATTTTCAAGTATATATAAGA
AAGGAAATTAATACTCTCGTTACCTAGAAACAATTCAGGAGCTTTTTTTTTTGTCTTTTTTTAAATGCACATCT
TCTCGCCACCTGCTTTTTCCCTCCAGTGTACATATCATTGATCTTTTCATGTGAGCGAGTTGGTTTTGATGCC
ATCGTTTGAGAGTGCTGTATGCGGTTCCCTTTTCATGCTGTCTGTGTGGTTGCATGTGTGTATACTGGTTTCAGTA
CTTTAGTATCATAGTGCTACAGGGAACATGCTTTAGAGTTATGAGTTTGTCTGCATACCTAGTTTTCTTAGGAC
AATTCAATCCTAGAATTACTGGATTAAATATAAAATTTAAGGTAATAGCTTCTGGCTTATTACTGCATTTTAGAT
AGTATTACCTTCATCAGCAAGTCTAAAATGAAGTTTGGTATCGCTGAAAGTTCTTTCTTGTGTTGAGGTTTTT
TAGGAAATGATTGAAGTGATTATGCCCGGTGTAACATTTATGAAGTGTGTTCTCTTTCTTTGGAAATGGAAG
GGGCCGTTGCATCCTCCATTGCCCTCTCGCATCAGCCTCAGCCTCAGCAACCTCAGCAACAGCCCCCGCCACAG
CACCAGCCTCCGCACCAGCCCCCGCACCAGCCCCCGCCCCAGCACCAGCCCCCAGCACCACCCACAGCAC
CCGCCGACGACCAGCACCACCACCACCACCACCTGTCCGTCCCGCCCCCTCCTTTGATGCCGATGTCTCAG
CCACAGTTCCGGCCTCAGTACAGACCGCTCAGCCTCAGGCCAGCAGCAGCCGGATGCAGTGCCCCCAGCGCCAG
GGGCTCCGGCATAATAACAATTCTCAGAATGTAAGCAAGCGGCCATGCAGCAAATGCAGCCCACTGCGCCAAGG
AACAGCAATTTGCGTGAATTACCCATAGCGCCGTACACGTGATAGAATGAGCAGCAGCCGCTGCTCTGCCACG
CCCTCAGCACAAGTGAACCTATCGTCAGCGCGTCACCACCCTCGCGGGCCGTGGCGGGTTCCAGAAGCTCACAG
GGAAAGACGGAAGTGAAGTCAAGCCAGCTAGCCCTGTGGCTCAACCTAAAGAAGAGGCAAAAACAGAAACAGAG

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FIGURE 2462B

TTTCCTGATGAAGATGAGGAAACAAGGTTATATCGCTTAAAGATAGAAGAACAGAAACGCCTAAGAGAAGAAATC
CTGAAACAGAAGGAGTTACGGCGGCAGCAGCAGGCTGGTGCCAGGAAGAAGGAGCTGCTGGAGAGACTCGCGCAG
CAACAGCAGCAGCTGTACGCTCCCCACCCCCAGCAGAGCAGGAAGAGCAGGCACTGTCACCATCACCCACCAAC
GGTAACCCACTGTTGCCCTTTCCAGGTGCACAGGTCAGACAAAATGTGAAGAACAGACTTCTTGTTAAAAACCAG
GATGTCAGTATTTCAAACGTTTCAGCCAAAACATCCAATTTTGTACCATCCAGTGCCAACATGCAGTATCAAGGA
CAACAGATGAAAGCACTGAAACATTTGAGACAGACCAGAACAGTTCCCTCAAAGTCAGACTCAGCCGCTGCATAAA
GTGCTCCCGATCAAACCTGCAGATGTGGAGGAGCCAGCTGTCCCCCAGACTCCTCGAGTGGCGTCCATCCAGGGC
CGGCCCCAGGACACAAAGCCTGGCGTGAAAAGGACTGTCACGCACAGGACAAACAGTGGTGGTGGAGACGGGCCC
CACATCAGCTCCAAGGTCAGGGTGATTAAGCTGTCAGGTGGGGTAAGTTGACAAGTTTTATGAGAGCCTCTTTGA
GTCTGTGTATCAGATAGAATGTCCTCATTTCAGAGAAATGTTTTGAAGAAAGAATTAAAAAGTTACCTCTGTTAT
AGTCTTGTAaaaaaaaaaaaaaaaaaaaaaaaaaaaaa

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FIGURE 2463

MIEVIMPGVTIYELLFLFLWKWGPLHPPLPPPHQPQPQQPQQQPPQHQPPHQPPHQPPPQHQPPPQHPPQHPP
QHQHSHHHHHLSVPPPLMPMSQPQFRPHVQTAQPQASSSRMQCPQRQGLRHNTTSQNVSKRPMQQMQPTAPRNS
NLRELPIAPSHVIEMSSSRCSATPSAQVKPIVSASPPSRVAGSRSSQGKTEVKVKPASPVAPKEEAKTETETFP
DEDEETRLYRLKIEEQKRLREEILKQKELRRQQQAGARKKELLERLAQQQQQLYAPPPPAEQEEQALSPSPTNGN
PLLFPFGAQVRQNVKNRLLVKNQDVSI SNVQPKTSNFVPSSANMQYQQQMALKHLRQTRTPVQSQTQPLHKVL
PIKPADVEEPAVPQTTPRVASIQGRPQDTKPGVKRTVTHRTNSGGGDGPHISSKVRVIKLSGGVS

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FIGURE 2464

GCCGGTGTCTGTTGGTTCGCGGTACCTGTTCCAACACGGCTCGCGGGCCCGTGCCGGCTCCGGTCCCCGGCGCGGCTG
TCCGAGCCCCCTGCGGCGGGCGGACGATGGTGTGGCGGAGCACGCGGACGCGGGCGGGCGGGCGGGCGGGCATGAAG
GAGGATGGGAAGGGCAGGACGAGGTGTCGGCGCGGGAGCAGCACTTCCACAGCCAAGTGCGGGAGTCCACGATATG
TTTCCTTCTTTTTGCCATTCTCTACGTTGTTTCCTACTTCATCATCACAAGATACAAGAGAAAATCAGATGAACA
AGAAGATGAAGATGCCATCGTCAACAGGATTTTCGTTGTTTTTIGAGCACGTTCACTCTCGCAGTGTCTAGCTGGGGC
TGTTTTGCTTTTACCCTTCTCAATCATCAGCAATGAAATCCTGCTTTCTTTTCTCAGAACTACTATATTTCAGTG
GCTAAATGGCTCCCTGATTTCATGTTTTGTGGAATCTTGCTTCCCTTTTTTCCAACCTTTGTTTTATTGTATTGAT
GCCCTTTGCCTTTTCTTTCTGGAATCAGAAGGCTTTTGCTGGCCTGAAAAAGGGAATCCGAGCCCGCATTTTTGA
GACTTTGGTTCATGCTTCTTCTTCTTGCGTTACTCATTCTTGGGATAGTGTGGGTAGCTTCAGCACTCATTGACAA
CGATGCCGCAAGCATGGAATCTTTATATGATCTCTGGGAGTTCTATCTACCCTATTTATATTCTGTATATCATT
GATGGGATGTTTTGTTACTTCTCTTGTTGACACCAGTTGGCCTTTCTCGTATGTTTCACAGTGATGGGTCTAGTTGCT
AGTGAAGCCAACAATCTTGAAGACCTGGATGAACAAATTTATATCATTACCTTAGAGGAAGAAGCACTCCAGAG
ACGACTAAATGGGCTGTCTTCATCGGTGGAATACAACATAATGGAGTTGGAACAAGAAGCTTGAAAATGTAAAGAC
TCTTAAGACAAAATTAGAGAGGCGAAAAAAGGCTTCAGCATGGGAAAGAAATTTGGTGTATCCCGCTGTTATGGT
TCTCCTTCTTATTGAGACATCCATCTCGGTCCCTCTTGGTGGCTTGTAATATTCTTTGCCTATTGGTTGATGAAAC
AGCAATGCCAAAAGGAACAAGGGGGCCTGGAATAGGAAATGCCTCTCTTTCTACGTTTGGTTTTGTGGGAGCTGC
GCTTGAAATCATTTTGATTTTCTATCTTATGGTGTCTCTGTGTGCGCTTCTATAGCCTTCGATTTTTTTGGAAA
CTTTACTCCCAAGAAAGATGACACAATATGACAAAGATCATTGGAAATTGTGTGTCCATCTTGGTTTTGAGCTC
TGCTCTGCCGTGTGATGTGCGAGAACACTGGGAATCACTAGATTGATCTACTTGGCGACTTTGGAAGGTTTAATTG
GCTGGGAAATTTCTATATTGTATTATCCTACAATTTGCTTTTTGCTATTGTGACAACATTGTGTCTGGTCCGAAA
ATTCACCTCTGCAAGTTCCGAGAAGAACTTTTCAAGGCCCTAGGGCTTCATAAACTTCACCTACCAAATACTTCAAG
GGATTGAGAAACAGCCAAGCCTTCTGTAAATGGGCATCAGAAAGCACTGTGAGACGCACAGACGGCGTCTTCTGC
CACCAAGAGACCCGAGAACTCCAGATTACGACATTCCCTGTCCCATGTAGAAGCATTTCATTCAACCGTGGCCC
CTCTTCAGAACCTAGACCTATCAGTGCCATTTTTTTTTTATAATCTACGAAGAACTTGGCTATGGCTGATCTTTT
TTAAATTTAACTTTCTGATGGACCCTGTAGTTTCCAGTTAAGTGCAGATTCTTTACAGACATATAGAACAGCGCA
TTCTTCTGTAGACATTTGCTCATGTTGGTAAATACAATCACCATATGAAAAAATTGTTTTACCTGATATGAAA
ATGTTAGAAAAGGCAAACTCCGGGACTTCTAAAGATTTACTTAAATCCCATTATGTACTTTATTGAGAATGTAGA
AGCTGACTTGAAAGGCATCCTTGGTACTAAGTGAAGCTTATTCAGAAAATGCATTTTTCAAATGCAATGGCAACT
GCTTGTAGATATCATTTTTGCAGTGTATGTTGGAGCTGTAATGGTTGCAATTATGTTTCTTATTTCTTAAAGC
AAAAAGCGTAGTTTCTGATTTATGTTATAGAATGATACTGATTAGACTTTGAGCCAAGGGGAAAAATACTAAATTC
TTTTAAACCTGGAGCCTTAGAGAGCCACAGGAATATCTTCTGTTGTACAGTCTAATAAGCTGTGGTAGGAAGTAT
CATGTAATCACAGTTTAAATGACAGTTTATGTATATATATAAATTCAGTATTCCCTCTGATAACATAGTTGCCAGTG
TTTAATACACTTGTAACCTTGATTTTTTACCTTATAGGCTATATGTATACTCAGTTTTTTTAAAGCATTTTTTTTCAG
AGATCACTTAATTCCCCATGCTTCTGCAATGCATATAAAAACTATAAATGCCGAGTGGTAGAACTCCTCTTTCT
TCATAGTCCCTCAGGCTTTGGTTACATTTGCATATGCCATTTGAAGCCTCCAGCTTTTACCAGTTTAAACATCCAAA
GTTACAGCATCAGCATTTCATGGTGTAAAGAACAGTTTTTGAGTATAACACGATCTGATAATCATTGATTATTAA
ATTGTAAATAATTATTGGGATGGTTTCTTGGCTTTAAGTCCACTGAATAAAAACTATGAAATTGCAAAAAA
AAAAAA

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FIGURE 2465

MEGQDEVSAREQHFHSQVRESTICFLLFAILYVVSFYIITRYKRKSDEQEDEDIVNRISLFLSTFTLAVSAGAV
LLLPFSIISNEILLSPQNYIQLNGSLIHGLWNLASLFSNLCFLVLMPPFAFFFFLESEGFAGLKKGIRARILET
LVMLLLLALLILGIVWVASALIDNDAASMESLYDLWEFYLPYLYSCISLMGCLLLLLLCTPVGLSRMFTVMGQLLV
KPTILEDLDEQIYIITLEEEALQRRNLGLSSSVVEYNIMELEQELENVKTCLKLEERRKKASAWERNLVYPVMVL
LLIETSISVLLVACNILCLLVDETAMPKGTRGPGIGNASLSTFGFVGAALEIILIFYLMVSSVVGIFYSLRFFGNF
TPKKDDTTMTKIIIGNCVSILVLSSALPVMSRTLGITRFDLLGDFGRFNWLGNFYIVLSYNLLFAIVTTLCCLVRKF
TSAVREELFKALGLHKLHLPNTSRDSETAKPSVNGHQKAL

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FIGURE 2466

TCTTTCCGTAACCGTAGCTTGAGGCACATTTCTTAAATATGCAGCATGGAACGCTTGGCGGTTCTGAACGCGCAT
CTCGTGCTGCTCCTGTAGGGCGGTTAGGACGCGCTCCTCTGGCGAGGAAGGTGGCAGCCTCCACTGTGCACGGGT
CACAGGCGAGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGT
GAGCTGTGCGGGTCCAGGCAGTGTCTCAGTGGTGAGAGCCACAGCACATTTGAAAGTCCACATGTGTTTGCCCCAC
TGTGGTCCAGGACATGTGTGAGCCACACTCAGTGGACTTGCACCTGTGACATGTTGGTCAGCGTGGCGGCCGTCA
GCTGGGTGTGGAATGCATCTGATTGGAGCCTGGCACCCGGCCTACCATGATTGTGATTCTCTGGGGCGAGTCTTG
AGTGTGGGCAGGGCCTCAGGCCCCCAAGAGGGCTGTGAGCAGGCACCTTCTGTGAGGCACGATGCCACCATGTG
AAGTTGTGTGGGTCTTTGGAGAGTTCTGGCAGGTTGAGGGCCTGTGCGTGTGGGACCCAGGCCTGCCCTGCCTGC
TGCCGGCCATGTTCCCTCTGCCCAGTCATGTTGACAATTGTGGCCAAATTCAACATCGGGCCTGTTTCTCTGCACC
CACGTTGGCACACACTGAGTTCAAGACAGTTTCTGCAGAAATGAATCCAGAGGTGTTTATTTCTGGCACGTTGGA
TCAGACGTTCCAGAGGGTGGGCGTCTTTCTCCATGCACTTCAGCTGGATCAGTCAGTGTGAGCCATTGACTTTAGC
AACAGGGAAATGAAAGACTTTCTCAATAAGAAATGGGACTTTCTCACGCTGGATGGCACAGAGCTGGCAAACAT
GAGGCCAGTCCACACCAAGGCTTTGCGTGCAGAAAGGCTGCACTGTGGCCAGCGGGGGAAGCGGAGGAGACACT
GTGGACACCCCTCCCCACAGGTGGGCACACCTTTGCGCAGGCCAGTGTGCGTCTGAAGGAGAGCCCAGGGTGGG
GTTCCGGGACTGAGGTGCAGCCGTGTCCAGGGTGGGCTTCTAGCTCTGCCGCTGGGCGGAACCTGGGGTAGGTCCC
AGGGTGGGGTTCCAGGACTGAGGTGCAGCCGTGCCAGGGTGGGCTTCTAGCTCTGCCGCTGGGCGAAGCTGGGG
TAGTCCCAGGGTGGGCTTTTAGCTCTGCCGCTGGGCGGAACCTCGGGTAGGTGGGAGTCCTCACTTCTCTGCAGGG
TGGTGAAGCTCTCTGGGTAGTGTGAGCAGTTCTCAACGTGCACCTTGGAAGCGCCGTTTTGAGGTTTAGCTGT
GGCCAAGATAGATGACTTCATTTTGTGTCTTTTGTCTTAAACATGGGGAGATATTTAGAAAACATGTTTGGCTC
TTGCTGGGGAAGCAGTGCTGTTCCGTACAGTGTTTTACAAGCCGTGTTTCTTAGGATTGAAAGAAGGTGGCAAG
AGGAAGAAGCAGAAGCAGAGAGAGGAGTGAAGAAGAAGAAGTCGACCAAAGGCAATCACTAGACCGGACTTGAG
GCACGCGGTGCACCCCCAGACGCTGGCGCTCCACCGTGCTCGGCATGCGTCTGTCACACGCGCTAGGTAGCAGC
GTCCGTGAGGACTGTCTCGAGGCCACACTCGCTCGGCAGGATTATGCGATCACGGATCAGTCAGAGCAGGGTCAG
GAGACGGGGCTGACGGCACGGGTGGCGGGGACAGACGTTTGGGACTTGGCCGCGACTCTCTGCTTCTCTCCAGCT
CTCAATCTGCTGCATTTTCTCTAGTGCTTCCGGATCCTCTTCACTTTTTCGGCTACTCAACCACTCCGCATGC
TGCTGGAATATTTCTGGCTTTAGAAGTACAGGAGGGCGCAGATGGCTAACTGAGTAACATTGAAATGAGGCT
TTCTGTGGCGGCGTAGTGTGGAATTAGAAGGTAATTCAGTAGAGTGTAACCTAGAGAATATTGCAAGTGACAC
ATTGAATCCTGCCCCTCAGGGCACCTTTTCTCAGAGCAATCCGGCCACACGAATAGAAGGCTGTCGTGAATCAC
ATCAGATGTAAATCATTCCTTCTGTTTACTCTTTTAAATTTTTCATCCTTTGCGAGGTAGTGCAAATTCACCTTCAA
ATATGGTGTAGGTTTTGCTAGATTCCATATTTTTTCTTGGATTTTTGCTAATTATTTTTAGCAAAAAATTTTTG
CTCAGTGGCACTCTCCCTAGTGTCATGGGTTAGGGCCATGCTGGGGAACCGGGCCGGTATTTACACACGCGCA
AAACACCCAGAGACGGCACAAAGGAGTTGAACTCATGTTTCAGTTCGCGAACATTGACTCCTTACGAAAGTCACT
TCATTCTAACTAGATGCGCCCACTTCCGGTCAATTATTTGTTTTGCATGATGATTGCTTCTTACGTTTTGTTTT
TATTGAGCACGGAGTAGAATTCCAGGGCTGCCTTGACTTCTTCCCTGCATGCTCCCTCCAGTGACTTTCCTTCC
CTTTCACATGAGGATCTGCCGTTTATGTTGCTTTCTCCTTTGCTCCTTGGACTTGGGGCATTGTGAAAAGCTT
TGCTGTGATTTAAAAATGCCAGCAATTTTAACTAGCAGTGTTGAAGCTGGGAATTTTTTGGCGCAATCCATGTA
GCAGTGACCCAGGCTTGGGAGCCAGAAACAAGTGTGACCTGGGATTTTATTTAACACAACGTGTGCCAAAGAGTT
GGCTTTGTTTTATTTGGTTTTGGCGGGGAGAGGAGTGGTATTTGATGCTTTCTGTGGACAATGTAACCCTAAACAC
ATCATGTATTTTAAATGCCACCTACATAAATAAAACATAAGCATATTGAATAC

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FIGURE 2467

CTAAGACAGGTGCAGACGTATGTCGGCTTTGGCGTATCCATCAAGCTTTATATTGCTTTGATTATGATTTGGAGG
AAAGTGGAGAAATTAAAGATATGTTACTTGTAGTGTTCATAAAATATTAATTATATCAAGAAAGAAGAGGGGAAGAA
GATTTCTTAGTTGTCTCTTCAACTGGAATATCAACTTCATCAAAATGATCCACGGGACCATTAAAAACCAGTTAC
AGGGATTACAAAAGTCTTTGATGGTATACATTGCAGAAATTTATTTACAGAGCTTGAAAAAGGCTTCAGGGAAAA
TACTGGAGGCGATTGAAAATGATTGCATCCAGGACTTCATGTTTCACGGGATACACCTTCCGAGGAGGTCTCCAG
TGCATTCCAAAGTGCGGGAGGTTCTGAGTTACTTTCACCATCAAAAGAAAGTTCCGGCAGGGAGTGGAAGAGATGC
TTTATAGATTATATAAGCCCATCCTTTGGAGAGGATTAAAGGCCAGAACTCTGAAGTTTCGATCAAATGCTGCAT
TGTTGTTTGTGTAAGCATTTCCTATTAGGGATCCAAACCTTCATGCTATTGAAATGGATAGTGAAATCCAGAAAC
AGTTTGAAGAGCTCTATAGCCTTTTAGAAGATCCTTACCCGATGGTCCGTTCCACAGGGATCCTTGGTGTGTTGTA
AAATAACTTCTAAGTACTGGGAAATGATGCCCCGACCATTCTTATTGACCTCCTGAAGAAGGTGACTGGGGAAC
TGGCATTGTGACACGAGCTCAGCTGATGTTCTGTTCTGCTTTAAGTGTCTGCCAATGATTTTGGACAACAAAC
TGAGCCACCCATTGTTAGAGCAGCTCCTTCCAGCTCTCAGATACAGTCTCCACGACAATTCCGAGAAAGTGAGGG
TAGCTTTTGTGGACATGCTGTTGAAGATCAAAGCTGTGAGGGCTGCTAAGTTTTGGAAAAATATGTCCCATGGAGC
ACATTCTGGTTCGTCTGGAACTGATTCTCGACCTGTGTCTCGGCGCCTGGTGAGCCTCATCTTTAATCTTTCC
TGCTGTGAATCAGCCGGAGGAGGTCTGGTGCGAGCGCTGTGTACCCCTGGTGAGATGAACCACGCCGCTGCCA
GGAGGTTCTATCAGTACGCCCACGAACACACCGCCTGCACCAACATAGCAAAGCTGATTACGTTATTCTGTCATT
GCTTAAATGCCTGTATCCAGAGGGCAGTGAGAGAGCCTCCAGAGGACGAGGAGGAAGAGGACGGAAGGGAGAAGG
AGAATGTGACTGTTCTGGACAAAACACTGTCAAGTAAACGATGTTGCATGCATGGCAGGTTTACTAGAAATCATTG
TGATTCTCTGGAAGATATTGACAGAAGTATGGAAAAATAATAAGAGGGCCAACTTTACACGATTAACAAGTTTG
CCTCTGTGCTTCCAGAGTATCTGAAAGTATTTAAGGATGATCGCTGCAAGATCCCTTTATTATGCTAATGTCTCT
TTATGCCGGCCTCTGCTGTCCCCCATTAGCTGTGGTGTGATTTCCACGCTGAGAAGCCGGGAGGAGGGCGCTG
TGGACAAGAGCTACTGCATTTGTTGGATTGCTCTGCTCCTGGGGGCAAGTGGGGCACATTCTGGAGCTTGTG
ACAACGGCTGCCACAGAGCATGCCAGGCCAAGAGCAACACAGCTTCTAAAGGTAGGGTGCAGATCCATGACA
CACGCCCAGTCAAACCTGAATTGGCATTGGTCTACATTGAGTATCTGCTGACTCATCAAAGAACCGCAGTGCT
TGCTCTCTGCTCCTCGGAAGAACTTAACCATCTTTTGAAAGCCCTTGAAACGTCAAAGGCAGATCTGGAGTCAC
TTCTGCAGACACCGGGTGGGAAGCCTCGTGGCTTCAGTGAAGCAGCTGCCCCGCGAGCCTTTGGTCTCCACTGTC
GCCTGAGCATCCATCTTCAGCACAAGTTCTGCTCAGAAGGAAAGGTGTATTGTCCATGTTGGAAGACATGGCT
TTTGGTTAGAAAGCAAATTTTATCTTTTATTCAAGATCAAGAAGAAGACTACCTGAAGCTTCATAGGGTCATTT
ATCAGCAAATTATCCAGACCTACCTGACTGTGTGTAAGATGTTGTTATGGTAGGCCTTGGTGACCATCAGTTTC
AGATGCAACTCTTACAGCGGAGTCTTGGAATCATGCAACAGTGAAGGGATTTTTTTATGTTTCATTACTTCTTG
ACATTCTGAAAGAGATAACTGGAAGTTCCTTGATTGAGAAAACAGATTGAGATGAAGAAGTTGCAATGCTGTG
ACACAGTCCAGAAAGTATTTGAGAAAATGTTGGAATGTATTGCACGGAGCTTCAGGAAGCAGCCGGAAGAAGGCC
TGCGGCTGCTTTATTCTGTTTACAGAGGCTCTTCATGAGTTTCACTGCTGTTTCACTGCTGTTTCACTGCTGTTT
CTGTGCACCGGGGTGTACTTTTACTCTGATCGCTGGGCTGTGGTTGAGATAAGTACACGCTACGGAAGGTTT
CTGACGTAGAAGAGCTTACCCCTCCAGAGCATCTTTCTGATCTTCCACCATTTTCAAGGTGTTTAAATAGGAATAA
TAATAAAGTCTTCGAATGTGGTCAGGTCATTTTTGGATGAATTAAGGCATGTGTGGCTTCTAATGATATTGAAG
GCATTGTGTGCTCACGGCTGCTGTGCATATTATCCTGGTTATTAATGCAGGTAAACATAAAAGCTCAAAAGTGA
GGGAGGTTGCAGCCACTGTTACAGAAAACATAAGACATTGAGGAAATTACTTTGGAAGAGGATAGCATTGAAA
GATTTCTCTATGAATCATCATCAAGAACTCTGGGAGAACTTTTGAATTCATAACCAAGCCAACATCTCCAGACAT
GTAATAATAGGGAAGGTGATTCAAATTGAAATGCCTGTGTATTTTCTATTGTTTTTAATGTTAATAACCCATA
TAATAGGGAAGGGTGGGATTTTTTGTGGGAATGTGGGAAGGTGGGGGTATGGAGGAGATAACTCAAACTTC
TTCAATTTTGCCTAGTGCTGCGTAAATAATATATTTAATAATAAGGACTCCAGGTATAAATGGTGTAGAAATCC
ATGATTCCAAGAAAAACACTTTTCTAGCAAACTGGTTGTTTTTAAATGACTTTTATATATGTAATATTGCTT
GGAACTATGAGTAATAAGCAATGACAACAAAAA

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FIGURE 2468

MLLECFININYIKKEEGRRFLSCLFNWNINF IKMIHGT IKNLQGLQKSLMVYIAEIFYFRAWKKASGKILEAIEN
DCIQDFMFHGIHLPRRSPVHSHKVRVLSYFHHQKKVRQGV EEMLYRLYKP ILWRGLKARNSEVRSNAALLFVEAF
PIRDPNLHAIEMDSEIQKQFEELYSLLED PYPMVRSTGILGVCKITSKYWEMMPPTILIDLKKTGELAFDTSS
ADVRC SVFKCLPMILDNKL SHPLLEQLLPALRYSLHDNSEKVRVAFVDMLLKIKAVRAAKFWKICPMEHILVRLE
TDSRPVSRRLVSLIFNSFLPVNQPEEVWCERCVTLVQMNHAAARRFYQYAHEHTACTNIAKLIHVIRHCLNACIQ
RAVREPP EDEEEEDGREKENVTVLDTLSVNDVACMAGLLEIIVILWKSIDRSMENNKEAKLYTINKFASVLP EY
LKVFKDDRCKIPLFMLMSFMPASAVPPFSCGVISTLRSREEGAVDKSYCTLLDCLCSWGQVGHILELVDNWL PTE
HAQAKSNTASKGRVQIHDTRPVKPELALVYIEYLLTHPKNRECLLSAPRKKLNHLLKALET SKADLESLLQTPGG
KPRGFSEAAAPRAFGHLHCRSLIHLQH KFCSEGKVYLSMLEDTGFWLESKILSFIQDQEEDY LKLHRVIYQQI IQT
YLTVC KDVMVGLGDHGFQMQLLQRS LGIMQTVKGFFYVSLLLDILKEITGSSLIQKTDSD EEVAMLLDTVQKVF
QKMLECIARSFRKQPEEGLRLLYSVQRPLHEFITAVQSRHTDTPVHRGVLSTLIAGPVVEISHQLRKVSDVEELT
PPEHLSDLPPFSRCLIGIIKSSNVVRSFLDELKACVASNDIEGIVCLTAAVHIILVINAGKHKSSKVR EVAATV
HRKLKTFMEITLEEDSIERFLYESSSRTL GELLNS

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FIGURE 2469

CGGGACGGAGGGGGCGGCCCCCGCGCTCGGGGCGCTCGGCTACAGCTGCGGGGCCCCGAGGTCTCCGCGCACTCGC
TCCCGGGCCATGCTGGAGGCGGCGGAACCGCGGGGACCTAGGACGGAGGCGGCGGGCGCTGGGCGGCCCCCGGCA
CGCTGAGCTCGGGATGCGGACGCTGCTGCCTCCCGCGCTGCTGACCTGCTGGCTGCTCGCCCCCGTGAACAGCAT
TCACCCAGAATGCCGATTTTCATCTGAAAATACAGGAGGAAGAAACAAAATGTGCAGAGCTTCTGAGGTCTCAAAC
AGAAAAACACAAAGCCTGCAGTGGCGTCTGGGACAACATCACGTGCTGGCGGCCTGCCAATGTGGGAGAGACCGT
CACGGTGCCCTGCCAAAAGTCTTCAGCAATTTTTACAGCAAAGCAGGAAACATAAGCAAAAACCTGTACGAGTGA
CGGATGGTCAGAGACGTTCCAGATTTCTGTCGATGCCTGTGGCTACAGCGACCCGGAGGATGAGAGCAAGATCAC
GTTTTATATTCTGGTGAAGGCCATTTATACACTGGGCTACAGTGTCTCTCTGATGTCTCTTGCAACAGGAAGCAT
AATTCTGTGCCTCTTCAGGAAGCTGCACTGCACCAGGAATTACATCCACCTGAACCTGTTTCTGTCTTTCATCCT
GAGAGCCATCTCAGTGTGGTCAAGGACGACGTTCTTACTCCAGCTCTGGCACGTTGCACTGCCCTGACCAGCC
ATCCTCCTGGGTGGGCTGCAAGCTGAGCCTGGTCTTCTGCACTACTGCATCATGGCCAACTTCTTCTGGCTGCT
GGTGGAGGGGCTCTACCTCCACACCTCCTGGTGGCCATGCTCCCCCTAGAAGGTGCTTCTTGGCCTACCTCCT
GATCGGATGGGGCTTCCCCACCGTCTGCATCGGTGCATGGACTGCGGCCAGGCTCTACTTAGAAGACACCGGTTG
CTGGGATACAAACGACCACAGTGTGCCCTGGTGGGTCATACGAATACCGATTTTAAATTTCCATCATCGTCAATTT
TGTCCTTTTTCATTAGTATTATACGAATTTTGCTGCAGAAGTTAACATCCCCAGATGTGCGCGGCAACGACCAGTC
TCAGTACAAGAGGCTGGCCAAGTCCACGCTCCTGCTTATCCCGCTGTTTCGGCGTCCACTACATGGTGTGTTGCCGT
GTTTCCCATCAGCATCTCCTCCAAATACCAGATACTGTTTGAGCTGTGCCTCGGGTCGTTCCAGGGCCTGGTGGT
GGCCGTCTCTACTGTTTCTGAACAGTGAAGTGCAGTGCAGCTGAAGCGAAAATGGCGAAGCCGGTGCCCGAC
CCCGTCCGCGAGCCGGGATTACAGGGTCTGCGGTTCTTCTTCTCCCGCAACGGCTCGGAGGGCGCCCTGCAGTT
CCACCGCGGCTCCCGCGCCAGTCCCTTCTGCAAACGGAGACCTCGGTTCATCTAGCCCCACCCCTGCCTGTGCGGA
CGCGGCGGGAGGCCCACGGTTCGGGGCTTCTGCGGGGCTGAGACGCGGCTTCTCTTCCAGATGCCCGAGCAC
CGTGTGCGGGCAGGTCAGCGCGGTCTGACTCCGTCAAGCTGGTGTGCTCACTAAACCCCATACCTGG

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FIGURE 2470A

GTGAACCGTG CATGTGAGGGATCTAGGTTGCGCTATCCTTATGAGAATCTAATACCTATTGATCTGTCACTTTCT
CCCATCACGCTCAGGTGGGACCATCCAGTTGCAGGAAAACAAGCTTAACACGCCCAGTATTCTACATTATGCTC
CTACCTCCCAGCAGCCTCTCCAGGCCCAGAACTTTCTCCAGTCAGCCTCTACAGACCAAGCTCATGACTCACAAAT
GGCCTATTTAGGCCCATAACCTACCTCAGGCAGTCTCCGCAGATGAGCCTACTGCCTCACAACAGCCTCCACAG
GCACAGCTCCATCGTTACAATGGCCTCTTTAGACCCAGCTCCTGCCTCCCAGCCTTCTCTCCAGGCCCTGAACCT
TCTCAAGTCGACCTCACCAGGCCAGCTCATGCTTCTTTGCAGCCTCTCCAGGCCAGCTCCTGCATCTTGGTGG
CACCTCCAGGCCAGCCTCTGCCTCCCGTCGGCCTCTACAATCCCAACATCTGCCTCACAGCAGATTCTTCAGGC
CCAGCATCTGCCTCACTGTGGACCCCCCAAGCCAAGCTCCCAACCTTTCAGCAGCTTCTACACACCCAACTCCTG
CCACCCAGTGGCCTCTTTAGGCCAAGCTCATGCTTACAAGGGCCTTTCAGGCTCAACTTTTGTCTCATGGCAA
CCTTTTCCTGGCCAGATTCTGCCTGTCTCCAGCAGCCTAGACAGGCCAGGTCTTGCCTCACACTGGCCTCTCT
ACATCCAGCTCATGCCTCAGGTGGCCTCTCCAGGCCAACTCCTGTCCCAGGACGTCATCTCCGGGCCAAAAC
TTACTCAAGTCAGACTCTCTAGTCCCAACTGCTGCCTCCTGGTGGCCTATGAAGGCCAAAATCTCCTCAAGTGG
ACCTCTCCAGGCCAGCTCCTGCCTCCTGTGAGCGTCTACAGGCCAACTCTGCCTCATGGGGCTTCTCCAGG
CCCACCTCTTCTCTTGGCTGGGTCTACAGGCACAACCTGCTGCCTCACAACAGCCTTTTTTGGGCCAGTTCTCT
CCAGCTCATGGCGGCCAATGTAGGCCAAAACCTTCTCAAGTCAAACCTCTCCAGGCCACCTTCTGCTTCCCGGT
GGCATGAACAGGCCAGCTTTGACTTGAGAACAGCCTCTGCAGGCCCTGCTCTTGCCTCCCAGGGGCTTTTTCCA
GACCCAGCTCCTGCCTCATGGCAGCTGCCCCAGGCCAAATTTCTGCCTGCCTGCCAGCAGCCTCAACAGGCACAG
CTCCTCCCTCACAGTGGCCCATTTAGGCCAACTCATGACTGTGGGCCATTTCCAGGCCAGTGCCTGCCTCGT
GGCTGACTCTTGAAGGCCAAAACCTTCTCAAATCAGCCTTTTGCCCAACTTCTGTCTACTGTGCGACTCTACAGG
CCAGCCTCTGCCTCACAGTGGACCTCCAGACCCAGATGGTGTCTCACTGTGGCATCCTCAGGCGAAGCTCCTGC
CTTTCCGCAGCCTCTACAGGCCAGCTCCTGCCTTGCAGTGGCCTCTTAGGCCAAGCTCATGCCCCATGGCGAC
TTTTCCAGGCACAGCTTTTGCCTTTTGCAGCCTGTCCAGGCCCAGAAATGTCCTTAACTCGGCATCTCCAGGATGA
GCTCATCTCCAGTGCCTCTACAGGCCCGTCTCCTGCCTCACAACAACCTCCTTTGGCCCAACTCCTGCTGAGC
TGCTGGCAGCCTCTGTAGGCCACAGAATTCTTAAGGTAAAGCTTTCCAGGCCACCTTTGGCCTCCCGGCAGGCT
CAGCAATCAAACCTATTCCTCACTGCGGCCACCGAAAGCCAAGTTTCTCCCTGCCTCAGGCATCCTCCGAAAAC
TGAGCATTTGCCTCAGGTGGCCTCCCCAGGCCATGAATCTGCCTGCCTCCCAGGCAGCTGCTGCCTCACAATGG
TCTCTTTAGGCCAGCTCATGCTAAAAGATGGACTCTCCAGGCACAGCTCTTGCCTCCTGGCAGCCTCTGCAGGC
CCAAATCTCCAAAAGTTGGCCTCTCCTAACTCAGCTCCTGCCTCATGTGCGCCTACACAGGCCAGACTCTTAC
CACACAGTAGACCTCCAGGCCACCACTTGCCTGATCATAGCCTCCTAAGGCCAAGCTCCTGCCTTTCCGGCAGC
CTCTACAGGCCAAGCTCCTGCCTCGCAATTGCCTCTGTAGGCCAAGATCATGCCGTGAAGTGGCCTTCCCTAGCC
TAACTTTTGCTTTTTGACGCATACTCCAGTCCCAAACTTCTCCAGTCAGCCGGTCCAGGCCAAGCTCTTCTCT
CCAAAGGCTTCTGCAGGCCAAAATCATCTGAAGTACCCTCTGCAGGCGCAGCTCCTGCCTCCAAGTGTGTGT
AGGCCAAGCTAATGCCTCACAGCACACTTCCAGGCTGAGCATTCTCTTTGTGCATCCTCTCCAAGCCCTGAAC
TTACTCCAGTTGGCCTCTCCAGACCAAGCTCTCCCTCCAGTGGCCTCTACAGGCCAAAATGTCTCTCAGGTCAG
CCTCTCCAGGCCAACTCCTAGCTACCGGTGGCTTCTGCAGGCCAAAATCGACCTCAAGTCAGCCTCTTTCACACC
CAGCTCTTGCCTCTGAGTGGCCTCTCCAGGAGCAAACTTCTCAAGTCGGCCTCTCCAGGCCAGCCTCCTGCT
TCCCGAGGGCATGTACAGGCCAGCCTCTGCCTCACAGCAGACTCTTACACCCAGCTCTTCCCTGTCTGCGGCC
TCTCCAGTCCAAAGCTGCTCCTGCCTTTTGGCAGCTTGTACAGGCCAGCTCCTCCCTCACGGTGGCCTCTTTTCG
GCCCCAATCATGCCTCTTGCAACGTGCCCCAAGTGTACGCTCCTGCCTCACACTGGCCTGTGTAGGCCAGCTCAT
GCCTCTCGTGGCCTCAACGGGCCATCCCCGCTGTGCGCGGCCCTCTACAGGCCCGGCCTCTACCTCACAGTGG
GCTCTCCAGGCCACCTCTTCTCACCGTGGCCTCCTGGGGCAATGCTCCTCCCTCTCGGGAGCCTCTGTGGGCC
CAGCTCCTGCCTCCAGTGGCCTCTGCTGGCCAAGCCGTGCCTCAGGGCAGCCTTTCCAGGCCTAGCGTTTGCT
GCTTTGCATCCTCTCCAGGCCCTGGACTTCTCCAGTCGGCCTCTCCAGGCCAGCTCTTCTCTCGGGCGCCTC
TGCAGGCCAGACTGTCTCAAGTCGGCCTGTCCAGGCCAGCTCCTGCCTCCCGGGCGCCTCTGCAGGCCAAG
TCGTCTCAAGTTGGCCTCCCCAGGCCAGCAACGGCCTCTCGGGCGCCTTTCCGGGTGCAAAAGTTCTCGAGT
CAGCCTCTCCAGGCCAGCTCCTCCTGCCTCCAGTGGCCTCTTTCGGGCCAGGCCAGCTCATGCCTCCCGGCGG
CCTTCCAGGCCCTGCTTTTGAATTTCCGTGGCCTCTGCAGGCCTCGACAAGGCCAGGCCTCCTGCCTCCAAAG
GCCTGCACAGGCCAGCCTCTGCCTCACAGCAGACTCTCCAGGCCAGCTAGCTCTGCCTCACTGCGGCTTCCC

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FIGURE 2470B

GAGTCCAAAGCTCCTGCCTCTCAGCCGCTTCGGCAGGCCCAGCTCCCGCCTGCCAGTGGCCTCTTCAGGCCCATG
GGGCTCATTCCCTCACAACGGCCTTTCAGGCCCAGTTTTCCCTTCCGGCGGCCTCTTGGCCTCTAATTTGTTTA
TCTTTTGGGTATAAATCCCAAAATATTGAATTTTGAATATTTCCACCATT

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FIGURE 2471

TCTAATACCTATTGATCTGTCACTTTCTCCCATCACGCTCAGGTGGGACCATCCAGTTGCAGGAAAAACAAGCTTA
ACACGCCCCTGATTCTACATTATGGTGAGTTCTATAATTATTTTATTATATATTACAGTGTAATAATGGAAATA
AAGTGCCTAATAAATGTAAATGTGCTTAAATCTTTTGGCCCAGCTCCTACCTCCCAGCAGCCTCTCCAGGCCCAG
AACTTTCTCCAGTCAGCCTCTACAGACCAAGCTCATGACTCACAATGGCCTATTTAGGCCCATAACCTACCTCAC
GGCAGTCTCCGCAGATGAGCCTACTGCCTCACAAACAGCCTCCACAGGCACAGCTCCATCGTTACAATGGCCTCTT
TAGACCCAGCTCCTGCCTCCCAGCCTTCTCTCCAGGCCCCTGAACCTTTCTCAAGTCGACCTCACCAGGCCCAGCTC
ATGCTTCTTTGCAGCCTCTCCAGGCCCAGCTCCTGCATCTTGGTGGCACCTCCAGGCCCAGCCTCTGCCTCCCGT
CGGCCTCTACAATCCCAACATCTGCCTCACAGCAGATTCTTCAGGCCCAGCATCTGCCTCACTGTGGACCCCCCA
GACCCAGATGGTGTCTCACTGTGGCATCCTCAGGCGAAGCTCCTGCCTTTCCGCAGCCTCTCCAGGCCCAGCTCC
TCCTGCCTCCCAGTGGCCTCTTTCGGCCCAGCCCAGCTCATGGCTCTCGGCGGCCTTCCCAGGCCCCGCTTTTGA
CTTTTGGCGGCCTCTTCAGGCC

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FIGURE 2472

TCTAATACCTATTGATCTGTCACTTTCTCCCATCACGCTCAGGTGGGACCATCCAGTTGCAGGAAAACAAGCTTA
ACACGCCCCTGATTCTACATTATGGTGAGTTCTATAATTATTTTATTATATATTACAGTGTAATAATGGAAATA
AAGTGCCTAATAAAATGCAAAATGTGCTTACATCTTTTGGCCCAGCTCCTACCTCCTGGCAGCCTCTCCAGGCCAG
AACTTTCTCCAGTCAGCCTCTACAGACCAAGCTCATGACTCACAATGGCCTATTTAGGCCCATACCCTACGTCAC
GGCAGTCTCCGCAGATGAGGCTACTGCCTCACAACAGCCTCCACAGGCACAGCTCCATCGTTACAATGGCCTCTT
TAGACCCAGCTCCTGCCTCCCAGCCTTCTCTCCAGGCCCTGAACTTTCTCAAGTCGACCTCACCAGGCCAGCTC
ATGCTTCTTTGCAGCCTCTCCAGGCCAGCTCCTGCATCTTGGTGGCCCCCTCCAGGCCAGCCTCTGCCTCCCGT
CGGCTCTACAGTCCCAACATCTGTCTCACAGCAGATTCTTCAGGCCAGCATCTGCCTCACTTGGACCCTCCAG
ACCCAGATGGTGTCTCACTGTGGCATCCTCAGGTGAAGCTCCTGCCTTTTCGGCAGCCTCTCCAGGCCAGCTCCT
CCTGCCTCCCAGTGGCCTCTTTCGGCCCAGCCCAGCTCATGCCTCCCGGCGGCCTTCCCAAGCCCCGCTTTTGAC
TTCCACCGAAAGTCCCAGCCTCCTGCCTCCCGAAGGCCTGCACAGGCCCA

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FIGURE 2473

ATGTTGCCAATAACACAGATGAAGAGACTGGGGGATGGCACTATCACTGCTGCTGTACTGAAGGTTAGCAAAGGT
GCTAATCCAGTGGAATCAAGAGAGGTGTGATGTTAGCTGTTGATGCTGTAATTGCTGAACCTAAAAAGCAGTCT
AAACCTGTGACCAAACCTGAAGAAATTGCACAGGTTGCTACAATTTCTGCAAATGGAGACAAAGAAATTGGTAAC
ATCATCTCTGATGCAATGAAAAAGTTTGGAAAGAAAGGGCATCATCACAAAAATTTCTAGTGTCCAGTCCATTGTA
ACTGCTCTTGAAATTGCCAATGCTTACTGTAAGCCTTTGGTCATAATTGCTGGAGACATTGATGGAGAAGCTCTA
ACTACACTCATCCTGAATAGGCTAAAGGTTGGTCTTCAGGTTGTGGCAGTCAAAGCTCCAGGGTTTGGTGACAAT
AGAAAGAACCAGCTTAAAGATACGGTTATTGCTACTGGTGGAGAAGTTGGAGAGGTCAGTGTGATCAAAGATTAT
GCCATGCTCTTAAAAGGAAAAGGTAACAAGTCTCAAATTGAAAAATGTGTTCAAGAAATCATTGACCAGTCAGAT
GTCACAACTAGTGAATACGAAAAGGAAAACTGAGTGGAGAACTTTTCAGATGGAGTAGCTGTGCTGAAGCTAAT
GAAGATAAAATAATTGGTATAGAAATTATTTAAAAGAACTCAAAATTCAGCAATGACAATTGCTAAGAATGCA
GGTGTGATGGATTTTTGATAGTTGAGAAAATTATGTAA

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FIGURE 2474

MLPITQMKRLGDGTITA AVLKVS KGANPVEIKRGV MLAVDA VIAELKKQSKPVTKPEEIAQVATISANGDKEIGN
IISDAMKKFGRKGIITKISSVQSIVTALEIANAYCKPLVIIAGDIDGEALTTLILNRLKVGLQVVAVKAPGF GDN
RKNQLKDTV IATGGEVGEVTVIKDYAMLLKGKGNKSQIEKCVQEIIDQSDVTTSEYEKEKLSGETFRWSSCAEAN
EDKIIGIEI IKRTLKIPAMTI AKNAGVDGFLIVEKIM

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FIGURE 2475

ATGTACTGGGACATCGTGTCTTTGGAGACAGCTATACCCCACTTGTCCATTCTGCTGAGGCCACAAATGCCATC
ACCCAGAAGCCCTTCACATCCACTGGGGCCACAGCAGGATACAGTCTGTTGCTGGTCCAGCAGCCTGATAAAATC
ATTGTCCTCTCCACCCCTGATTCTTACAGGAGACTACTCACCCCATACCTCAAAAACCTCTTCATGAGGATGGTG
ACCCAGCCATGAGGACCCCTCGCCATCCTTGCTGCCATTCTCCTGGTGGCCCTGCAGGCCAGGCTGAGCCACTC
CAGGCAAGAGCTGATGAGGTTGCTGCAGCCCCGGAGCAGATTGCAGCGGACATCCAGAAGTGGTTGTTTCCCTT
GCATGGGACGAAAGCTTGGCTCCAAAGCATCCAGGCTCAAGGAAAAACATGGACTGCTATTGCAGAATACCAGCG
TGCATTGCAGGAGAACGTCGCTATGGAACCTGCATCTACCAGGGAAGACTCTGGGCATTCTGCTGCTGA

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FIGURE 2476

CTATAGAAGACCTGGGACAGAGGACTGCTGTCTGCCCTCTCTGGTCACCCTGCCTAGCTAGAGGATCTGTGACCC
CAGCCATGAGGACCCTCGCCATCCTTGCTGCCATTCTCCTGGTGGCCCTGCAGGCCAGGCTGAGCCACTCCAGG
CAAGAGCTGATGAGGTTGCTGCAGCCCCGGAGCAGATTGCAGCGGACATCCCAGAAGTGGTTGTTTCCCTTGCA
GGGACGAAAGCTTGGCTCCAAAGCATCCAGGCTCAAGGAAAAACATGGCCTGCTATTGCAGAATACCAGCGTGCA
TTGCAGGAGAACGTCGCTATGGAACCTGCATCTACCAGGGAAGACTCTGGGCATTCTGCTGCTTGAGCTTGCAGAA
AAAGAAAAATGAGCTCAAAATTTGCTTTGAGAGCTACAGGGAATTGCTATTACTCCTGTACCTTCTGCTCAATTT
CCTTTCCTCATCCCAAATAAATGCCTTGGTACAAGAAAAG

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FIGURE 2477

MRTLAILAAILLVALQAQAEPLQARADEVAAPEQIAADIPEVVVSLAWDESLAPKHPGSRKNMACYCRIPACIA
GERRYGTCTIYQGRLWAFCC

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FIGURE 2478

CCTTGCTATAGAAGACCTGGGACAGAGGACTGCTGTCTGCCCTCTCTGGTCACCCCTGCCTAGCTAGAGGATCTGT
GACCCCAGCCATGAGGACCCTCGCCATCCTTGCTGCCATTCTCCTGGTGGCCCTGCAGGCCCAGGCTGAGCCACT
CCAGGCAAGAGCTGATGAGGTTGCTGCAGCCCCGGAGCAGATTGCAGCGGACATCCCAGAAGTGGTTGTTTCCCT
TGCATGGGACGAAAGCTTGGCTCCAAAGCATCCAGGCTCAAGGAAAAACATGGACTGCTATTGCAGAATACCAGC
GTGCATTGCAGGAGAACGTCGCTATGGAACCTGCATCTACCAGGGAAGACTCTGGGCATTCTGCTGCTTGAGCCTTG
CAGAAAAAGAAAAATGAGCTCAAAATTTGCTTTGAGAGCTACAGGGAATTGCTATTACTCCTGTACCTTCTGCTC
AATTCCTTTCCTCATCTCAAATAAATGCCTTGTTAC

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FIGURE 2479

MRTLAILAAILLVALQAQAEPLQARADEVAAAPEQIAADIPEVVVSLAWDESLAPKHPGSRKNMDCYCRIPACIA
GERRYGTCTIYQGRLWAFCC

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FIGURE 2480

ATGCAGGTCTGCAACTGCAGGTGCCTCTCACCTGGTGACCTGCAGGAAGATGGAGGAGCATATTGGGCACAGTGC
TCGGTTTGGGGGGCGCACTTCGACCCGGAAGTTTACCTAGACAAGCTGCATAGAGTGTGCCCTCTGGCCCAGCTG
ATGGACAGTGAGACGGACATGGTGCGGCAGATCCGGGCTATAGACAGCGACATGCAGACCCTGGTCTATGAGAAC
TACGACAAGGAGACTATCGGGGTGCAACCTGGCTGGGGCGGGGAGGAGGTGCAGGGCCTGGCCAGAGCGGGCCTG
GCCACGGGCAAGGGACAGCGACCGCCTGGGCCAGGACAGGTGAGAGCGGCGCAGTCCCGGGCCCGGCGTGTCGCG
GCTGCGCGGGAGAGGCCAGCAGAGGGCGCCAGAGAGCCAGGAGCGGCCCCGCGAGGAGCCCGGCCAGCCGGATG
CCCAGCTCCGCGCCGCGCGGACCCAAACGAGCCCGCGCTCAGACGCCCCAGCTCCGCCGAGAGGCCGCTCGCGCCG
GGCAGAGCCCCCTGGAGCCATGGCCAGCCCTTCCGGCAGCTCCGAAGCCACTGGCAAGCCCCGAGGCAGGGATGGC
CGGCCCAGGAGGGAGGAGGACGACGTCCCTCCCGAAGAGAAGAGGCTACGGCTGTTGCTGGAGGGGGGAAGCGCA
CAGCCCGAGGACTGCGAGGACGGGGAGGACGCGCTGCGGCCGGGCAGGGAGGAGACCGGCACCTTAG

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FIGURE 2481

MQVCNCRCLSPGDLQEDGGAYWAQCSVWGAHFDPEVYLDKLHRVCPLAQLMDSSETDMVRQIRAIIDSDMQTLVYEN
YDKETIGVQPGWGGEVQGLARAGLATGKGQRPPGPGQVRAAQSRARRVRAARERPAEGAREPGAARGGARASRM
PSSAPRGPNEPALRRPSSAERPLAPGRAPGAMASPSGSSEATGKPRGRDGRPRREDDVPPEEKRLRLLEGGSA
QPEDCEDGEDALRPGREETGT

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FIGURE 2482

GAGAGTCGCGCCCGGGAGTCCGCCGCCTGCGCCAGGATGGAGTTCGTGAAATGCCTTGGCCACCCCGAAGAGTTC
TACAACCTGGTGCGCTTCCGGATCGGGGGCAAGCGGAAGGTGATGCCCAAGATGGACCAGGACTCGCTCAGCAGC
AGCCTGAAAACTTGCTACAAGTATCTCAATCAGACCAGTCGCAGTTTCGCAGCTGTTATCCAGGCGCTGGATGGG
GAAATGCGCAACGCAGTGTGCATATTTTATCTGGTTCTCCGAGCTCTGGACACACTGGAAGATGACATGACCATC
AGTGTGGAAAAGAAGGTCCCGCTGTTACACAACTTTCACTCTTTCCTTTACCAACCAGACTGGCGGTTTCATGGAG
AGCAAGGAGAAGGATCGCCAGGTGCTGGAGGACTTCCCAACGATCTCCCTTGAGTTTAGAAAATCTGGCTGAGAAA
TACCAAACAGTGATTGCCGACATTTGCCGGAGAATGGGCATTGGGATGGCAGAGTTTTTGGATAAGCATGTGACC
TCTGAACAGGAGTGGGACAAGTACTGCCACTATGTTGCTGGGCTGGTCGGAATTGGCCTTTTCCCGTCTTTTTCTCA
GCCTCAGAGTTTGAAGACCCCTTAGTTGGTGAAGATACAGAACGTGCCAACTCTATGGGCCTGTTTTTGCAGAAA
ACAAACATCATCCGTGACTATCTGGAAGACCAGCAAGGAGGAAGAGAGTTCTGGCCTCAAGAGGTTTGGAGCAGG
TATGTTAAGAAGTTAGGGGATTTTGCTAAGCCGGAGAATATGACTTGGCCGTGCAGTGCCCTGAATGAACCTTATA
ACCAATGCACTGCACCACATCCCAGATGTCATCACCTACCTTTGAGACTCAGAAAACCAGAGTGTGTTTAACTTC
TGTGCTATTCCACAGGTGATGGCCATTGCCACTTTGGCTGCCTGTTATAATAACCAGCAGGTGTTCAAAGGGGCA
GTGAAGATTCGGAAGGGCAAGCAGTGACCCTGATGATGGATGCCACCAATATGCCAGCTGTCAAAGCCATCATA
TATCAGTATATGGAAGAGATTTATCATAGAATCCCGACTCAGACCCATCTTCTAGCAAAAACAAGGCAGATCATC
TCCACCATCCGGACGCAGAATCTTCCCAACTGTCAGCTGATTTCCCGAAGCCACTACTCCCCATCTACCTGTCTG
TTTGTCTATGCTTTTGGCTGCCCTGAGCTGGCAGTACCTGACCACTCTCTCCAGGTAACAGAAGACTATGTTTCA
ACTGGAGAACACTGATCCCAAATTTGTCCATAGCTGAAGTCCACCATAAAGTGGATTTACTTTTTTTCTTTAAGG
ATGGATGTTGTGTTCTCTTTATTTTTTCTTACTACTTTAATCCCTAAAAGAACGCTGTGTGGCTGGGACCTTTA
GGAAAGTGAAATGCAGGTGAGAAGAACCATAACATGAAAGGAAAGGGTGCCCTATCCCAGCAACCTGTCTTGTG
GGTGATGATCACTGTGCTGCTTGIGGCTCATGGCAGAGCATTCAAGTGCCACGGTTAGGTGAAGTCGCTGCATAT
GTGACTGTCATGAGATCCTACTTAGTATGATCCTGGCTAGAATGATAATTAAAAGTATTTAATTTG

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FIGURE 2483

TCCGGCAACGCCAACCGCTCCGCTGCGCGCAGGCTGGGCTGCAGGCTCTCGGCTGCAGCGCTGGGCTGGTGTGCA
GTGGTGCAGCACGGCTCACGGCAGCCTCAGCCACCCAGATGTAAGCGATCTGGTTCCCACCTCAGCCTCCCGAG
TAGTGGATCTAGGATCCGGCTTCCAACATGTGGCAGCTCTGGGCCCTCCCTCTGCTGCCTGCTGGTGTGGCCAAT
GCCCCGAGCAGGCCCTCTTTCCATCCCCTGTGGATGAGCTGGTCAACTATGTCAACAAACGGAATACCACGTGG
CAGGCCGGGCACAACCTTCTACAACGTGGACATGAGCTACTTGAAGAGGCTATGTGGTACCTTCCTGGGTGGGCCC
AAGCCACCCAGAGAGTTATGTTTACCGAGGACCTGAAGCTGCCTGCAAGCTTCGATGCACGGGAACAATGGCCA
CAGTGTCCACCATCAAAGAGATCAGAGACCAGGGCTCCTGTGGCTCCTGCTGGGCCCTTCGGGGCTGTGGAAGCC
ATCTCTGACCGGATCTGCATCCACACCAATGCGCACGTGAGGCTGGAGGTGTGGGCGGAGGACCTGCTCACATGC
TGTGGCAGCATGTGTGGGGACGGCTGTAATGGTGGCTATCCTGCTGAAGCTTGGAACCTTCTGGACAAGAAAAGGC
CTGGTTTCTGGTGGCCTCTATGAATCCCATGTAGGGTGACAGCCGTAATCCCTCCCTGCTGAGCACCACGTC
AACGGCTCCCGGCCCCCATGCACGGGGGAGGAGATACCCCAAGTGTAGCAAGATCTGTGAGCCTGGCTACAGC
CCGACCTACAAACAGGACAAGCACTACGGATACAATTCTACAGCGTCTCCAATAGCGAGAAGGACATCATGGCC
GAGATCTACAAAACGGCCCCGTGGAGGGAGCTTTCTCTGTGTATTTCGGACTTCCTGCTCTACAAGTCAGGAGTG
TACCAACACGTCACCGGAGAGATGATGGGTGGCCATGCCATCCGCATCCTGGGCTGGGGAGTGGAGAATGGCACA
CCCTACTGGCTGGTTGCCAACTCCTGGAACACTGACTGGGGTGACAATGGCTTCTTTAAATACTCAGAGGACAG
GATCACTGTGGAATCGAATCAGAAGTGGTGGCTGGAATTCACGCACCGATCAGTACTGGGAAAAGATCTTAATCT
GCCGTGGGCCCTGTCTGTGCCAGTCTGGGGGCGAGATCGGGGTAGAAATGCATTTTATTCTTTAAGTTCACGTAAG
ATACAAGTTTCAGACAGGGTCTGAAGGACTGGATTGGCCAAACATCAGACCTGTCTTCCAAGGAGACCAAGTCCT
GGCTACATCCCAGCCTGTGGTTACAGTGCAGACAGGCCATGTGAGCCACCGCTGCCAGCACAGAGCGTCCTTCCC
CCTGTAGACTAGTGCCGTAGGGAGTACCTGCTGCCCCAGCTGACTGTGGCCCCCTCCGTGATCCATCCATCTCCA
GGGAGCAAGACAGAGACGCAGGAATGGAAAGCGGAGTTCTTAACAGGATGAAAGTTCCCCCATCAGTTCCCCCAG
TACCTCCAAGCAAGTAGCTTTCCACATTTGTACAGAAATCAGAGGAGAGACGGTGTGGGAGCCCTTTGGAGAA
CGCCAGTCTCCCAGGCCCCCTGCATCTATCGAGTTTGCAATGTCAACCTCTCTGATCTTGTGCTCAGCATGAT
TCTTTAATAGAAGTTTTATTTTTTCGTGCACTCTGCTAATCATGTGGGTGAGCCAGTGGAACAGCGGGAGACCTG
TGCTAGTTTTACAGATTGCCTCCTTATGACGCGGCTCAAAAGGAAACCAAGTGGTCAGGAGTTGTTTCTGACCCA
CTGATCTCTACTACCACAAGGAAAATAGTTTAGGAGAAACAGCTTTTACTGTTTTTGAAAAATTACAGCTTCAC
CCTGTCAAGTTAACAAGGAATGCCTGTGCCAATAAAAGTTTTCTCCAACCTGA

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FIGURE 2484

MWQLWASLCCLLVLANARSRPSFHPLSDELVNYVKNRNTTWQAGHNFYNVDMSYLRKLCGTFLGGPKPPQRMFT
EDLKLPAFDAREQWPQCPTIKEIRDQSGSCSWAFGAVEAISDRICHTNAHVSVEVSAEDLLTCCGSMCGDGC
NGGYPAEAWNFWTRKGLVSGGLYESHVGC RPYSIPPCEHHVNGSRPPCTGEGDTPKCSKICEPGYSPTYKQDKHY
GYNSYSVSNSEKDIMAEIYKNGPVEGAFSVYSDFLLYKSGVYQHVTGEMMGHAI RILGWGVENGTPYWL VANSW
NTDWGDNGFFKILRGQDHCGIESEVVAGIPRTDQYWEKI

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FIGURE 2485

CTGGGAAGCAGAGTGTCTGGATGGAACCTGAGCTGGGTCTCTGACTCACTTCTGACTTTAGTTTTTTCAAGGGGG
AACATGGCAAAGGTGTTTCAGTTTCATCCTTGTTACCACCGCTCTGATAATGGGCAGGGAAATTCGXXXXXXXXXX
XX
XX
XX
AAACCTCTCCAGAGCCTAGCAGAATTTTCTGTTTATTGTGACATGTCCGATGGAGGAGGATGGACTGTAATTCAG
AGACGATCTGATGGCAGTGAAAACTTTAAACAGAGGATGGAAAGACTATGAAAATGGCTTTGGAAATTTTGTCCAA
AAACATGGTGAATATTGGCTGGGCAATAAAAACTTCACTTCTTGACCACTCAAGAAGACTACACTTTAAAAATC
GACCTTGCAGATTTTGAATAAATAGCCGTTATGCACAATATAAGAAATTTCAAAGTTGGAGATGAAAAGAATTC
TACGAGTTGAATATTGGGGAATATTCTGGAACAGCTGGAGATTCCCTTGCGGGGAATTTTCATCCTGAGGTGCAG
TGGTGGGCTAGTCACCAAAGAATGAAATTCAGCACGTGGGACAGAGATCATGACAACTATGAAGGGAAGTGCACA
GAAGAAGATCAGTCTGGCTTGTGGTTTAAACAGGTGTCACTCTGCAACCTGAATGGTGTATACTACAGCGGCCCC
TACACGGCTAAACAGACAATGGGATTGTCTGGTACACCTGGCATGGGTGGTGGTATTCTCTGAAATCTGTGGTT
ATGAAAATTAGGCCAAATGATTTTATTCCAAATGTAATTAAATTGCTGCTGTTGGGCTTTGTTTTCTGCAATTCA
GCTTTGTTTAAAGTGATTTGAAAAATACTCATCTGAACATATCCATGCGCAATCATGATAACTGTTGTGAGTAG
TGCTTTTCATTCTCTCACTTGCCTTTGTTACTTAATGTGCTTTCAGTACAGCAGATATGCAATATTCACCAAT
AAATGTAGACTGTGTT

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FIGURE 2486

MAKVFSFILVTTALIMGREISXX
XXXXXXXXXXIFNDGYKLSGFYKIKPLQSLAEFSVYCDMSDGGGWTVIQRRSDGSENFNRGWKDYENGFGNFVQK
HGEYWLGNKNLHFLTQEDYTLKIDLADFEKNSRYAQYKNFKVGDEKNFYELNIGEYSGTAGDSLGNFHPFVQW
WASHQRMKFSTWDRDHDNYEGNCAEEDQSGLWFNRCHSANLNGVYYSGPYTAKTDNGIVWYTWHGWWYSLKSVVM
KIRPNDFIPNVI

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FIGURE 2487

GGGACAGAGGAGACAAGATGGCGCTGCGGGCGATGCGGGGGATTGTCAACGGGGGCCGACCCGAGCTACCCGTGC
CCACCGGTGGGCCGGCGGTGGGAGCTCGGGAGCAGGCGCTGGCAGTCAGTCGGAACCTACCTCTCCCAGCCTCGCC
TCACATACAAGACAGTATCTGGAGTCAATGGTCCACTAGTGATCTTAGATCATGTTAAGTTTCCCAGGTATGCTG
AAATTGTCCATTTGACCTTACCGGATGGCACAAAGAGAAGTGGGCAAGTTCTGGAAGTTAGTGTTTCCAAGGCAG
TAGTTTCAGGTATTTGAAGGGACTTCAGGTATAGATGCTAAGAAAACGTCCTGTGAGTTTACTGGGGATATTCTCC
GAACACCGGTGTCTGAGGATATGCTTGGTCGGGTATTCAATGGATCGGGAAAAACCCATTGACAGAGGTCTGTG
TACTGGCCGAAGACTTCCTTGATATCATGGGTGAGCCAAATCAACCTCAATGTCGAATCTACCCAGAGGAAATGA
TTCAGACTGGCATTTCGGCCATCGATGGGATGAACAGTATTGCTAGGGGGCAGAAAAATTCCTATCTTCTGTCTG
CTGGGCTACACACAATGAGATTGCAGCTCAGATCTGTGCGCAGGCTGGTTTGGTAAAGAAATCCAAAGATGTAG
TAGACTACAGTGAGGAAAAATTTGCAATTGTATTTGCTGCTATGGGTGTAAACATGGAACTGCCCGGTTCTTCA
AATCTGACTTTGAAGAAAATGGCTCAATGGACAATGTCTGCCCTCTTTTGAACCTGGCTAATGACCCAAACATTG
AGCGAATTATCACTCCTCGCCTGGCTCTAACCACAGCTGAATTTCTGGCGTACCAATGTGAGAAACATGTATTGG
TTATTCTAACAGACATGAGTTCTTATGCTGAAGCACTTCGAGAGGTTTCAGCAGCCAGGGAAGAGGTACCTGGTC
GACGAGGTTTTTCAGGTTACATGTATACAGATTTAGCCACGATATATGAACGCGCTGGGCGAGTGGAAGGGAGAA
ACGGCTCGATTACTCAAATCCCTATTCTAACCATGCCTAATGATGATATCACTCACCCCATCCAGACTTGACTG
GCTACATTACAGAGGGGCAGATCTATGTGGACAGACAGCTGCACAACAGACAGATTTATCCACCTATCAATGTGC
TGCCCTCACTATCACGGTTAATGAAGTCTGCTATTGGAGAAGGGATGACCAGGAAGGATCATGCCGATGTATCTA
ACCAGCTAGTATGCGTGCTATGCTATTGGAAAGGATGTGCAAGCCATGAAAGCTGTCGTTGGAGAAGAAGCCCTT
ACCTCAGATGATCTTCTCTACTTGGAAATTTCTGCAGAAGTTTGAGAGGAACTTCATTGCTCAGGGTCCTTACGAA
AATCGCACTGTCTTTGAGACTTTGGACATTGGCTGGCAGCTACTCCGAATCTTCCCCAAAGAAATGCTGAAGAGA
ATCCCTCAGAGCACCCCTCAGCGAATTTTACCCTCGAGACTCTGCAAAGCATTAGCTGCTGCTTCTGCATTGCTCC
GCGCTCTTGTGAAATACTGGTTCTGTTTTCTTTATTCCTTTGCACTCTCGGTTCCACCTTTGTGTTGGAGTTT
ACCATGTTACCCTGTAATTAAAAACAAAGAAATAGGTAACATATTGTGCCAGTGTTGCAACGTTTTAACTGCTAA
CAGACCTTAAATATCCCCCTACCTGGGTCCTCAGTGCTATGTTTAAAGTGCTGCAGGGATGGAGTGGCGTTTTT
TTATTGCTGTATGTATTGTACATAGTGGAGTAGTTAGTTACCTGATAACAGTCTTGTTATTTGGGTCTCTTAGAC
CTTACCTCTCAACTCCCTCAAGAGTACCAGTCTCTGAAGTTATAATGCTTTGGTCTCTACATTAGGGGCAAGATC
CAGTCTGAGAGAAGTCTCCTTTGAGAAGGGCCAAGAGGCTCTTTCCTGAGTGTTTGCTTTCCGTTTGTGTTGTTG
CCTGTATTGCTGGGCTGTGCTGCTGCTCGAAGCAGATGGTTTGGACTGTCTTTTGCTCTTTCTATATAATGAA
TAGATGAGTGAAAGGAGTTTTCTTTTTCTTTAGTACTTACGTATTGGGATTCCCTGTGCTTTACAGCTCTCCCT
CTCCAAATAATACACAGAATCCTGCAACTTTTGCACAGCTGGTATCTGTCTGGTAGCAGTGAGACCCCTTGTCT
TGGTGATCCTTACTGGGTTTCCAAGCAGAGGAGTCACATGATTACAATTGCCAGTAGAGTTGTTGTTGGGGTAC
AAGATGAGAAGAAAGAAAACCTACAGCCTTTCTACATTCTGACATGCTAACAGTGGTTTAAGTTTCTAAAGTGT
TTACCAGATGCTGAAGGCAAGGGGAGGGAGCAGAAGCACTTATGTTTACGGATATTTTAACTCTGTTAGAGAGC
AGCCTTTGAAAATCCCCAATTTGGTTCTGCTTTTTGACCTCTCTCTACCTTTTCAGGGTAATCTTTGTGGCACAA
ACGATAGCATTTCGAAGCTTTAGAGTTTTCTGAATTC

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FIGURE 2488A

CTGGCCGGGAGGCTGGAGCCAGCAGCAGCGCGGGCGCGCGGCGTCTGCCAACTTGACGGCGCGGAGGGACCC
CTGACATTTTACTAAAATGAGCGTGCTCAGCAGGAAGAGATGTGTTCTCACGCTAGAAGCCACCCCGTCACATG
TAGTGGTGTCCTGTTTAAATGATTCTGACATGGATTATGAAAGGCCAAACGTAGAGACCATCAAGTGCCTTGTGG
TGGGGGACAACGCCGTGGGTAAAGACCAGGCTCATCTGTGCCCGCGCTTGCAATGCCACCCTCACCCAGTACCAGC
TGCTGGCCACGCATGTGCCACAGTATGGGCCATCGACCAATATCGTGTGTGCCAGGAGGTGCTGGAACGCTCCC
GAGACGTGGTAGATGATGTGAGCGTCTCTGTGCGCTCTGGGACACCTTTGGAGACCACCACAAAGACCGTCTGCT
TTGCTTATGGGAGATCTGATGTGGTGGTTCTGTGCTTCTCCATTGCCAACCCTTCCCTCCACCATGTCAAGA
CCATGTGGTACCCAGAAATCAAGCACTTCTGCCCGGAGCACCTGTCTATCTTGGTGGGTGCCAGTTGGACCTGC
GCTACGCTGACCTGGAGGCTGTCAACAGGGCTAGGCGACCTTGGCTAGGCCCATCAAACCTAATGAAATCCTGC
CCCCAGAGAAGGGTCGGGAGGTGGCCAAGGAGCTGGGCATCCCTACTATGAGACCAGCGTGGTGGCCCCAGTTCCG
GCATCAAGGACGTCTTTGACAACGCCATCCGAGCTGCACTCATCTCCCGCCGCCACCTGCAGTTCTGGAAGTCCC
ACCTCCGCAATGTGACGCGGCTCTGTGTCAGGCACCTTCTTACCCCCAAGCCACCGCCCCGATCATCGTGG
TGCCCGACCTCCCTCCAGCAGCGAGGAGTGCCCCGCCACCTCCTGGAGGACCCGCTCTGCGCGGACGTATCC
TGGTGTGTCAGGAGCGGGTGCATCTTTGCCACAAGATCTACCTCTCCACCTCCTCTCCAAGTTCTATGACC
TGTTCTCATGGACCTGAGTGAGGGGGAGCTGGGGGGCCCCCGGAGCCAGGGGGCACCCACCCAGAGGACCACC
AGGGCCACTCTGATCAACACCACCACCATCACCACCACCACCATGGGCGAGACTTCTGTCTCCGAGCAGCCAGCT
TTGACGTGTGCGAGAGCGTGGATGAGGCTGGGGGCTCCGGTCTGTGCTGGCTCCGTGCTTCCACCAGCGACGGGA
TCTTACGGGGCAACGGAACAGGGTACCTACCGGGCAGGGTCTGTGTGCTGTCTTCTGGAGCCGAGCTTTTGTGA
GCATCCAGGAAGAGATGGCAGAAGATCCTCTCACCTACAAATCCCGGCTGATGGTGGTGGTGAAGATGGACAGTT
CCATCCAGCCGGGGCCCTTCCGGGCTGTCTCAAGTACCTGTACACGGGGGAGCTAGATGAGAACGAGCGTGACC
TCATGCACATTGCCACATTGCTGAGCTGCTCGAGGTCTTGTATCTGCGCATGATGGTGGCCAACATTCTCAACA
ATGAGGCCTTCATGAACCAGGAGATCACCAGGCCTTCCACGTCCGCCGGACCAACCGGGTTAAGGAGTGCTTGG
CAAAGGCACCTTCTCAGATGTGACCTTCATCTGGATGATGGCACCATCAGCGCCCAAGCCCCCTGTTGATTT
CCAGCTGTGACTGGATGGCTGCCATGTTTGGGGGGCCATTTGTGGAGAGCTCCACCCGGGAGGTGGTGTTCCT
ACACAAGCAAGAGCTGCATGCGGGCCGTGCTGGAATACCTCTACACCGGCATGTTACCTCCAGCCCCGACCTGG
ATGACATGAAGCTCATCTTCTAGCCAACCGCTCTGCTGCCACACCTGGTTGCCCTCACAGAGCAGTACACAG
TGACCGGCTGATGGAAGCGACCCAGATGATGGTGGACATCGATGGGGACGTCTTGTGTTCTTGGAACTGGCTC
AGTTCCACTGTGCGTACCAGCTGGCCGACTGGTGTCTCCACCACATCTGCACCAACTACAACAAGTGTGCCGCA
AGTTCCCCCGAGACATGAAGGCCATGTCCCCAGAAAACAGGAGTATTCGAGAAGCATCGGTGGCCACCTGTGT
GGTACCTGAAGGAGGAAGATCATTACCAGCGGGCAGGAAGGAGCGTGAGAAGGAGGACTACCTCCACCTCAAGC
GGCAGCCCAAACGGCGTTGGCTCTTCTGGAACAGTCCATCCTCCCCGTCTTCTCGGCAGACCTCTCTCATCCC
CATCTTCTCTCGGCTGTGGTCTGAGATGCTGCCACCTCTTCTGACCTGCTGCTGTGTGTGTTCCCATCCGCTT
CACCCTCTGCTCTTCCGCATACCCCATCCACCTTACAGGGACAGGGGGCCACGTAACCAGGACCCAGAGGG
TGGAGCTCTTCTTACCAGCCACCGTGGCTCAGCCAGAGAGGAGCTGAGCCCTGTGGAGCAGAACGGGAACACCT
GCAGAGGTCCCCAGACCCAAAGCAGGACGGGAGACAACCTGCTTGGAGGAGCGAAGAGCCCTGGCATTATCTCT
GGGTTTGAGAGCCCTAGAGTCAAAGGGAAAGCCTCCAGCCTCCAGGGCTTCTCTGTGTGTCTTGGTTGCTGCTC
TGGCCAGGGAGGCAGCCCCACTCCAGCAAGCAGAAGTGATCCTCGAGGGTCTGCCCCCTGTTGGCCATATCTTT
CCACCGACGGACTTGAGTGTGCTTTGTTTTGTGGGCATTTCCACACGAAGCCTACTCACACCCTCACTGGAGA
AGTCAGGGTAGAAATTGAGCCTTCAGAGCCCAACTCAAGGCTTCTACATCCTGGGGTGCAGCTGCAAAAGGCCAG
ACGTGGAAGGCTGTATCCTGCCAGTGTCCCTCCGTCCAGGGGGCTGTGCTGGCACAGACCTGAGAATGGGGA
CACAGGTCATTGAGCTCCAGGCCTGGAAGCAGTGCCTCTTGGTGCAACAAGAACTTCTCCCTACCCCCCTCC
TTTACCCTCAGATTTGGAGATGGTAACCAAGGAAGCAGCTGGGACAGGTGGAGAAGGAAGTAGGAATGAGTGCA
CGGCGACCCCGTGTCTCTCAGGGCCCTCCCTGCTCTGGGTGGCACTGCTTTTTATAGGGTGGGGCAAAATTAG
CAAAAAACAACCAATGACAACCAAACTGAAACCGAAACGAAAAATCAACAAACACTCTGTCTCTATCCCTC
CAAAGAATGAAATCAGAAAAAGCCCTGCTAGCTCACATTTCTATAAACAGAGGCCCCCATGATGAGGAGGTG
AAGATTTAGGTTGAGAATCGACTCCAATGCCTTTAGGAAAGGACTCGGCACTTCTCTGACTGCGGAGGCCCTG
ACCCTGCCAGCTGGCTCCGAGGGCAACACAGGGGCTGGCTCTAGAGGGCTGGTGATTGAGGGGGCCGGGCTGG
CGGCAAGAGGGGTTTGGTCTCGGGGCTTAAATGGCACCAGACTCTTGCTTTTGGCCATCTGGAGACTGCAGGCT

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FIGURE 2488B

CCCTTCCTTACCCTCAGAGAGTGCTTAATGGTGGGTGTTTTTGCGGGGCTGCAATAGGGGCCAAAAAGTCAGGGGAAA
GGGGCACTGACCTGTAGTGAAAGGCCACAGGACACAGCCTTATTACTGCTGGGGTGGGATAAGGGGAAGGAGAAAG
AGGGAGAATGGAGCAGGAGGAAAAGCAGAGTTGGTCTAGAGAGGAGGAGGGCGGGGCTGGAGGAATGTGGGGGAT
TGAAACTAGCTCCCAGCCCCCATGGGGCAGCAGCTGGGCCACAATTGCCCTTTCCGTTTTCTAACCCCGACTCA
GATTTACACCACCCACACTCTTTTTAGGTGTAAAAGATGGAGTCCACGGAGGAGGGGCAGAGCCAGGAGGCAGTG
GGGCTGTGGGGCTCAGAGCTCAGGAGTCGCCTTACCTGAGAGAGATGTTCTAGCTGAGAGGGCCTGGCCCTGGGGT
GGGCTCCAGGAAAACGCTGGTTAGGCCTGGGATTGAGCTAACCTGAAACAAAAGGTAGTAGGCAGGACCTAATGAC
CAGAGGTTAAATCCTCATCAAGAGAGACCAGGCGGCTGGAGGACAAGCGGCTCTAACCTGGGGGCGGCCATGTT
GTCCAGGCCCAGGCCCCCTCCAGGACTGTGGCTGCCTCCCCCTCCACGGCCTCCAGGGCGGCTGGCTGGAAAGCCAC
GCGTATGCTGCCCTCTACAGGCTGCTCGGCCTCCCTGCAGCTCAGCGCAGCCCAGGGCTCCAAGTGAGGCCCAGA
AGCCCATGGGCAGGGCTGGGGGGACGAAGGGGGAACCCGGAGCACCTCCACTTCTAGGGAAGATGGACAGCGTGG
GGGCACACCTGGGCCCTCCCGGAAGCTGTGGACGAAAGGGAGAGCGGGTCTCCAGGGCAAGGGGAACGGGAAATA
GGTCTCCTAGGTGCCCTGAAGCGCTGAGCAACCTGGGTACCCTGGTGGGGATGCAGGGAAGGCCGGGGCAGAGAAA
GCGAAGGTCGACCCAGGGCTGTAGGAAGCCATAGGAGAGTGACCACGGGATTCCCTGAGAAACAGGGCCGGCCCC
CCAACCTCAGGGACCCACCGCCCATTCCTCCGAGAGCTGTCGGAACCAGATGCAACCCGGCAGCCCAGAGAACTCT
CCTGGGAGGCTGTGGGTGAGCCAGGCCAACATTGGTGTCCCTGTCCCCAGAGGGAGGAGCAGGCAGGAGAGAGAG
GGGAAGGAGGTATGAATCCCAGTCCCCAGGAACCTAGCTCTTTAACTCTGGGGAGTCGGATTACGAAACACCC
CCAGGAGGCCAAGCCTGAAAACAGAGGGGAGGGAGGAAGGAAGGAGTCCAGCAGGAGCACAGCCCTGGTTTCCT
GTCACCTCAGAGCTGATTACAGGAGGAGGGGAGGTTGGGGGGCGGGAGACAAAAACCACACCTCTTTTATATAA
GGTTTCATATTTAATTTGGTCATGGATTCAATAATACATAAGTATTTTGTAC

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FIGURE 2489

MDSDMDYERP NVETIKCVVVGDNVAGKTRLICARACNATLTQYQLLATHVPTVW AIDQYRVCQEV LERSRDVVDD
VSVSLRLWDTFGDHHKDRRFAYGRSDVVVLCFSIANPNSLHHVKT MWYPEIKHFCPRAPVILVGCQLDLRYADLE
AVNRARRPLARPIKPNEILPPEKGREVA KELGIPYYETS VVAQFGIKDVFDNAIRAALISRRHLQFWKSHLRNVQ
RPLLQAPFLPPKPPPIIVVPDPPSSSEEC PAHLLDPLCADVILVLQERVRIFAHKIYLSTSSSKFYDLFLMDL
SEGELGGPSEPGGTHPEDHQGHSDQH HHHHHHHHGRDFLLRAASFVCE SVDEAGGSGPAGLRAS TSDGILRGNG
TGYPGRGRVLSSWSRA FVSIQEEMAEDPLTYKSRLMVVVKMDSSI QPGPFRAVLKYLYTGELDENERDLMHIAH
IAELLEVF DLRMMVANILNNEAFMNQEITKAFHVRR TNRVKECLAKGTFSDVTFILDDGTISA HKPLLISSCDWM
AAMFGGPFVESSTREVVFPYTSKSCMRAVLEYLYTGMFTSSPDLD DMKLIILANRLCLPHLVALTEQYTVTGLME
ATQMMVDIDGDVLVFL ELAQFHCA YQLADWCLHHICTN YNNVCRKFPRDMKAMSPENQEYFEKHRWPPVWYLKEE
DHYQRARKEREKEDYLHLKRQPKRRWLFWN SPSSPSSSAASSSSPSSSSAVV

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FIGURE 2490A

GGTCTCAGCTGAGTCTGCTCTGATCACCCAACAAGACCTAGCTCCCCAGCAGAGAGCGGCCCCACAACAAAAGAG
GTCCAGCCCCCTCAGAGGGATTGTGTCCACCTGGACACCATATCTCAGAAGACGGTAGAGATTGCATCTCCTGCAA
ATATGGACAGGACTATAGCACTCACTGGAATGACCTCCTTTTCTGCTTGCCTGACACAGGTGTGATTACAGGTGA
AGTGGAGCTAAGTCCCTGCACCAGCAGCAGAAACACAGTGTGTGTCAGTGCAGAAAGGCACCTTCCGGGAAGAAGA
TTCTCCTGAGATGTGCCGAAGTGCCGCACAGGGTGTCCCAGAGGGATGGTCAAGGTCGGTGATTGTACACCCTG
GAGTGACATCGAATGTGTCCACAAAGAATCAGGTACAAAGCACAGTGGGGAAGCCCCAGCTGTGGAGGAGACGGT
GACCTCCAGCCCAGGGACTCCTGCCTCTCCCTGTTCTCTCTCAGGCATCATCATAGGAGTCACAGTTGCAGCCGT
AGTCTTGATTGTGGCTGTGTTTGTGCAAGTCTTTACTGTGGAAGAAAGTCCTTCTTACCTGAAAGGCATCTG
CTCAGGTGGTGGTGGGACCCCTGAGCGTGTGGACAGAAGCTCACAACGACCTGGGGCTGAGGACAATGTCTCTCAA
TGAGATCGTGAGTATCTTGACAGCCACCCAGGTCCCTGAGCAGGAAATGGAAGTCCAGGAGCCAGCAGAGCCAAC
AGGTGTCAACATGTTGTCCCCCGGGAGTCAGAGCATCTGCTGGAACCGGCAGAAAGCTGAAAGGTCTCAGAGGAG
GAGGTGCTGGTTCCAGCAAATGAAGTGATCCCACTGAGACTCTGAGACAGTGCTTCGATGACTTTGCAGACTT
GGTGCCCTTTGACTCCTGGGAGCCGCTCATGAGGAAGTTGGGCCTCATGGACAATGAGATAAAGGTGGCTAAAGC
TGAGGCAGCGGGCCACAGGGACACCTTGACACGATGCTGATAAAGTGGGTCAACAAAACCGGGCGAGATGCCTC
TGTCACACCCCTGCTGGATGCCCTGGAGACGCTGGGAGAGAGACTTGCCAAGCAGAAGATTGAGGACCACTTGTT
GAGCTCTGGAAAGTTTATGTATCTAGAAGGTAATGCAGACTCTGCCATGTCCTAAGTGTGATTCTCTTCAGGAAG
TCAGACCTTCCCTGGTTTTACCTTTTTTCTGGAAAAAGCCCAACTGGACTCCAGTCAGTAGGAAAGTGCCACAATT
GTCACATGACCGGTACTGGAAGAACTCTCCCATCCAACATCACCCAGTGGATGGAACATCCTGTAACTTTTTAC
TGCACTTGGCATTATTTTTATAAGCTGAATGTGATAATAAGGACACTATGGAAATGTCTGGATCATTCCGTTTTGT
GCGTACTTTGAGATTTGGTTTGGGATGTCATGTGTTTTCACAGCACTTTTTTATCCTAATGTAAATGCTTTATTTA
TTTATTTGGGCTACATTGTAAGATCCATCTACACAGTCGTTGTCCGACTTCACTTGATACTATATGATATGAACC
TTTTTTGGGTGGGGGGTGCAGGGCAGTTCACTCTGCTCCCAGGCTGGAGTGCAATGGTGCAATCTTGGCTCACT
ATAGCCTTGACCTCTCAGGCTCAAGCGATTCTCCACCTCAGCCATCCAATAGCTGGGACCACAGGTGTGCACC
ACCACGCCCCGGCTAATTTTTTGTATTTGTCTAGATATAGGGGCTCTCTATGTTGCTCAGGGTGGTCTCGAATTC
CTGGACTCAAGCAGTCTGCCACCTCAGACTCCCAAGCGGTGGAATTAGAGGCGTGAGCCCCATGCTTGGCCT
TACCTTTCTACTTTTATAATTCTGTATGTTATTTATGAACATGAAGAACTTTAGTAAATGTACTTGTGTTA
CATAGTTATGTGAATAGATTAGATAAAACATAAAAGGAGGAGACATACAATGGGGGAAGAAGAAGTCCCCGT
AAGATGTCACTGTCTGGGTCCAGCCCTCCCTCAGATGTACTTTGGCTTCAATGATTGGCAACTTCTACAGGGGC
CAGTCTTTTGAACGGACAACCTTACAAGTATATGAGTATTATTTATAGGTAGTTGTTTACATATGAGTCGGGAC
CAAAGAGAACTGGATCCACGTGAAGTCTGTGTGTGGCTGGTCCCTACCTGGGCAGTCTCATTGACCCCATAGC
CCCCATCTATGGACAGGCTGGGACAGAGGCAGATGGGTTAGATCACACATAACAATAGGGTCTATGTCTATATCCC
AAGTGAACCTTGAGCCCTGTTTGGGCTCAGGAGATAGAAGACAAAATCTGTCTCCACGTCTGCCATGGCATCAAG
GGGGAAGAGTAGATGGTGTCTGAGAATGGTGTGAAATGGTGGCATCTCAGGAGTAGATGGCCCGGCTCACTTCT
GGTTATCTGTCAACCTGAGCCCATGAGCTGCCTTTAGGGTACAGATTGCCTACTTGAGGACCTTGGCCGCTCTG
TAAGCATCTGACTCATCTCAGAAATGTCAATTCTTAAACACTGTGGCAACAGGACCTAGAATGGCTGACGCATTA
AGGTTTTCTTCTGTGCTCTGTTCTATTATTGTTTTAAGACCTCAGTAACCATTTTCAGCCTCTTTCCAGCAAACC
CTTCTCCATAGTATTTTCAGTCATGGAAGGATCATTATGCAGGTAGTCATTCCAGGAGTTTTTGGTCTTTTCTGT
CTCAAGGCATTGTGTGTTTTGTTCCGGGACTGGTTTGGGTGGGACAAAGTTAGAATTGCCTGAAGATCACACATT
CAGACTGTTGTGTCTGTGGAGTTTTAGGAGTGGGGGGTGACCTTTCTGGTCTTTGCACTTCCATCCTCTCCCACT
TCCATCTGGCATCCACGCGTTGTCCCTGCACCTCTGGAAGGCACAGGGTGTCTGCTGCCTCCTGGTCTTTGCCT
TTGCTGGGCCTTCTGTGACGACGCTCAGCCTCAGGGCTCAGAAGGTGCCAGTCCGGTCCCAGGTCCCTTGTCCC
TTCCACAGAGGCCCTTCTAGAGATGCATCTAGAGTGTGAGCCTTATCAGTGTTTTAAGATTTTTCTTTTATTTTT
AATTTTTTTGAGACAGAATCTCACTCTCTCGCCAGGCTGGAGTGCAACGGTACGATCTTGGCTCAGTGCAACCT
CCGCTCCTGGGTTCAGCGATTCTCGTGCTCAGCCTCCGGAGTAGCTGGGATTGCAGGCACCCGCCACACGC
CTGGCTAATTTTGTATTTTTAGTAGAGCGGGGTTTACCATGTGGTTCAGGCTGGTCTCGAAGTCTGACCTC
AGGTGATCCACCTTGGCCTCCGAAAGTGCTGGGATTACAGGCGTGAGCCACCAGCCAGGCCAAGCTATTCTTTTA
AAGTAAGCTTCTTGACGACATGAAATAATTGGGGGTTTTGTTGTTAGTTACATTAGGCTTTGCTATATCCCCAG
GCCAAATAGCAITGTGACACAGGACAGCCATAGTATAGTGTGCTCACTCGTGGTTGGTGTCTTTTATGCTTCTGCC

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FIGURE 2490B

CTGTCAAAGGTCCCTATTTGAAATGTGTTATAATACAAACAAGGAAGCACATTGTGTACAAAATACTTATGTATT
TATGAATCCATGACCAAATTAAATATGAAACCTTATAT

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FIGURE 2491

CGGACGCGTG GGCAGGCAGCAGCCGGGCAGGGATGCTCCTGCGCTCCCGGGCGGGCTCGGGCCCAGCCACCTGCT
CGCCGGGGAAGAGGACACGCAGAGGAGCAGCTGGCTTGCCCGGAGTCTCCACCTTGACCCAAGCATGCAGGGC
CCACCCCGCAGCCTCCGCGCTGGGCTCAGCCTGGACGACTTCATCCCTGGCCACCTCCAGTCCCACATAGGGTCT
TCCTCCCGGGGGACACGGGTGCCGCTGATCCGGAATGGTGGCTCCAACACCCTTAATTTCCAGTTCCACGACCCC
GCGCCCAGGACTGTGTGCAATGGGGGCTACACACCAAGACGAGATGCTTCCAGCACCCGGACCCCTGCGTGGTAT
CAGACCTGGCCAGGCCCTGGGAGCAAGCCCTCTGCAAGCACAAAGATCCCTGCCTCCCAGCACACCCAGAAGTGG
TCAGCCACGTGGACCAAGGACAGCAAGCGTCGGGACAAGCGCTGGGTCAAGTACGAGGGAATCGGGCCCGTGGAC
GAGAGCGGCATGCCCATTGCCCCCGATCCAGCGTTGACAGACCCAGAGACTGGTACCGGAGAATGTTCCAGCAG
ATTACCCGAAAATGCCAGACTTGCAGCTGGACTGGACCTTCGAGGAGCCACCCAGAGACCCAGGCATCTAGGA
GCCCAGCAAAGACCTGCCACAGGCCCGGCCCGGCAACATCTTCCAGTGGAAGAAGCTGGGACCACTCTGAAGAG
TTACCTAGAAGCACCTTCAACTACAGACCTGGAGCATTCTCCACTGTGCTGCAGCCCTCAAATCAGGTGCTCAGA
CGCCGGGAAAAAGTAGACAATGTCTGGACGGAAGAGTCTTGAAGCAGTTTCTGCAGGAACTAGAGACTGGGCAG
AGGCCCAAGAAACCGCTGGTGGACGACCCCTGGTGAGAAGCCCTCCCAGCCATTGAGGTGCTGCTGGAGAGAGAG
CTGGCCGAGCTGAGCGCCGAGCTGGACAAGGACCTGCGGGCAATTGAGACCCGACTGCGCTCCCCAAGAGCTCG
CCGGCGCCCCGACGGGCCCGGAGCAGCGGCCCGGCCCGGCCCTCAGCCTGGAGCTCCAGCTACCCACAT
GCACCTTACCTGGGTTCGCGCCGCTCCCTGAGTCCCCACAAAATGGCTGATGGAGGAAGCCCCCTCCTAGGTGCG
AGGGACTTTGTCTACCTTCTCAACCCGAGACCCCTAGTGCCTCTAACGGAGGGGGCAGCCAGCCAGGAGGGAA
GAGAAGAAGAGAAAGGCCGCCAGGCTCAAGTTGACTTCCAGGCGCAGTCCCCAAGGAGCTGACTCTGCAGAAG
GGTGACATTGTCTACATCCACAAGGAGGTGGACAAGAACTGGCTGGAGGGAGAGCACCACGGCCGCTGGGCATC
TTCCCTGCTAATTATGTGGAGGTGCTGCCCGCAGATGAGATCCCTAAGCCCATCAAGCCCCGACCTACCAGGTG
CTGGAGTATGGAGAGGCTGTGGCCAGTACACCTTCAAGGGGGACCTGGAGGTGGAGCTGTCTTCCGCAAGGGA
GAGCACATCTGCCTGATCCGCAAGGTGAACGAGAACTGGTACGAGGGACGCATCACGGGCACGGGGCGCCAAGGC
ATATTCCCTGCCAGCTACGTGCAGGTGTCTCGTGAACCCGGCTCCGGCTCTGTGACGACGGCCCCCAGCTCCCC
ACGTCTCCCCGCCTGACCGCTGCCGCCGCTCAGCCCGTACCCAGCTCCCCCTCAGCCCTGCGCAGCCAGCT
GACCCACCCGACTTGGGGGGACAGACCTCCCCCGTGCAGCTGGCTTCTCCTTCCCCACCCAGGAGCCTAGACCC
CAGACCCAGAATCTTGGCACCCCTGGTCCAGCTCTGTCCACTCTCGAGGTCCAGCCATCCCCTGGACCTGGGG
ACCTCCTCTCCTAACACCTCTCAGATACACTGGACCCCGTACCGGGCGATGTACAGTACAGGCCCCAGAACGAA
GACGAGCTGGAGCTGCGCGAGGGGGACAGGGTGGATGTCATGCAGCAGTGTGACGATGGCTGGTTGTGGGTGTC
TCCCGGAGGACCCAGAAATTCGGAACGTTCCCTGGAAATTACGTTGCCCCGGTGTGAGTGGTCTCCATGGCAACT
TGGAGCCAGCCAGGATGGGGTGGGGAGCGGTGGCACTCGTGGGAGGGAGAGGACCCCGCCACATCCTCCTTCC
CCAGGACCTGAGCTCCAGCATCTGCAGACGACCCCGCAGCATTTCCTCGGACCCCTCGAAGCCCCCTGGA
CTGATTCCACCCACGACTCACAGGCATTCTCCACAGCCCTTTCATTTCCTCCCCACCCCACTCCCCAAATAC
AGAGGTCTGCTTTGAAGCGGAGACCATTTCAGGCCCTTATTGAGACCAGACCCCAAGTCCCCACCCCATCCTG
CTCCAGCGTTTCTCTAACAGGGACCAGCTCTCCGCTTTGCCCCACGGGGTTCTCTAACAGAAACAGCTTCC
TAGCCTCGTAGAGACCAAAGGCCGCCCGCCTGCTGGGGTTCTCTCCAGCACCCAGCTTGCTGGCTGCCCTCT
TTGCCCTTCTGGCCTCCAGCTGGGTGTGGGGGGGCGGAGCAAGGCGGGGGACAGACGACGACCTTCTTAGCGATC
TAGGCCTGGCAAGAGCTCTGGCCCCAAGGCCCTCTCTCCAGGGGCTGCCAAGTCTGGCCCTGGCCCTGGCAT
ATACCCCGCACTGTGGGGCCAGGCACCACTAGCCTGGCTCAAATATTCCCCAGGGAGACTGCTGTGTGCTGCC
GCCTGCCTGCTGGCTCTCCCCAGCCCCACATCCCCTCTGGAAGAGAATGTAAATAAACCTGGACACAAGGGCC
TTCGTGGCCTCGA

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FIGURE 2492

MQGPPRSLRAGLSLDDFIPGHLQSHIGSSSRGTRVPVIRNGGSNTLNFQFHDPAPRTVCNGGYTPRRDASQHPDP
AWYQTWPGPGSKPSASTKIPASQHTQNWSATWTKDSKRRDKRWVKYEGIGPVDESGMPIAPRSSVDRPRDWYRRM
FQQIHRKMPDLQLDWTFEPPRDPRHLGAQQRPAHRPGPATSSSGRSWDHSEELPRSTFNRYRGAFTVLQPSNQ
VLRRREKVDNVWTEESWNQFLQLELTGQRPKKPLVDDPGKEKPSQPIEVLLERELAELSAELDKDLRAIETRLPSP
KSSPAPRRAPRPPAGPASAWSSSYPHAPYLGSARSLSPHKMADGGSPFLGRRDFVYPSSTRDPSASNGGGSPA
RREEKKRKAARLKFDFAQSPKELTLQKGDIVYIHKEVDKNWLEGEHHGRLGIFPANYVEVLPAD EIPKPIKPPT
YQVLEYGEAVAQYTFKGDLEVELSFRKGEHICLIRKVNENWYEGRITGTGRQGIFPASYVQVSREPRRLCDDGP
QLPTSPRLTAAARSARHPSSPSALRSPADPTDLGGQTSRRTGFSFPTQEPRPQTQNLGTPGPALSHSRGSPSHPL
DLGTSSPNTSQIHWTPYRAMYQYRPQNEDELELELREGDRVDVMQQCDDGWFVGVSRRTQKFGTFPGNYVAPV

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FIGURE 2493

ACTTCCGCCCCGGCGCGGAGACCGAAGGCTGGCGGCTGGTTCGCGTTGCAGGCAACATGTCGGAAGGAAACGCCGCC
GGCGAGCCCAGCACGCCGGGAGGGCCCCGACCTCTCCTGACTGGGGCCCCGGGGGCTCATCGGGCGGCGGCGCGG
CCTCCCCCTACCCCCGGCCGCTTCCCTCCATCCGTTCCAGGGACCTCACCCCTCGGGGGAGTCAAGAAGAAAACC
TTCACCCCAAATATCATCAGTCGGAAGATCAAGGAAGAGCCCAAGGAAGAAGTAACTGTCAAGAAGGAGAAGCGT
GAAAGGGACAGAGACCGACAACGAGAGGGGCATGGACGAGGGCGAGGCCGTCCAGAAGTGATCCAGTCTCACTCC
ATCTTTGAGCAGGGCCCAGCTGAAATGATGAAGAAAAAGGGAACTGGGATAAGACAGTGGATGTGTGTCAGACATG
GGACCTTCTCATATCATCAACATCAAAAAAGAGAAGAGAGAGACAGACGAAGAACTAAACAGATCTTGCGTATG
CTGGAGAAGGACGATTTCCCTCGATGACCCCGGCTTGAGGAACGACACTCGAAATATGCCTGTGTCAGCTGCCGCTG
GCTCACTCAGGATGGCTTTTTAAGGAAGAAAATGACGAACCAGATGTTAAACCTTGGCTGGCTGGCCCCAAGGAA
GAGGACATGGAGGTGGACATACCTGCTGTGAAAGTGAAAGAGGAGCCACGAGATGAGGAGGAAGAGGCCAAGATG
AAGGCTCCTCCCAAAGCAGCCAGGAAGACTCCAGGCCCTCCCGAAGGATGTATCTGTGGCAGAGCTGCTGAGGGAG
CTGAGCCTCACCAAGGAAGAGGAACCTGCTGTTTCTGCAGCTGCCAGACACCCCTCCCTGGCCAGCCACCCACCCAG
GACATCAAGCCTATCAAGACAGAGGTGCAGGGCGAGGACGGACAGGTGGTGCTCATCAAGCAGGAGAAAGACCGA
GAAGCCAAATTGGCAGAGAAATGCTTGTACCCCTGGCTGACCTGACAGAGGGTCAGGTTGGCAAGCTACTCATCCGC
AAGTCTGGAAGGGTGCAACTCCTCTTGGGCAAGGTGACTCTGGACGTGACCATGGGAACTGCCTGCTCCTTCTCTG
CAGGAGCTGGTGTCCGTGGGCCCTTGGAGACAGTAGGACAGGGGAGATGACAGTCTGGGACACGTGAAGCACAAA
CTTGATGTTCCCTGATTTTGAATCCCTCTTGGATCACAAACACCGGTAAAATGAGCAGGTGGAGGAGGACGGC
GCCTGTGCCCACGGCTGCTGCCTGCTCCAGACATTTTGTCTTGAATCTGTGAGACCCAGAAGGGGCCCCACTGAG
CCCACTCACTCCAGCCTTTGGCAACCATTTGTTCCAGGTCCCCCAGGGCTTCTCCACAGCAGCTGTGAATGGCA
CAGTGACCTTCTGTCAGCGTGAGATGGCACATCCTTGCTGCTGGGGACTTGGCCCTGCTATTTATTTTGTATT
TATGTCTTAATCTCTTCCACTGATGCATCCTCCAAGGGTAGATGGGGAGGGTCTGTGTGAAGGGGCCGGCTTCTC
TTGGTGCTGCTGGGTTGCAGGGGCAGGAAGCGTGTGGACTGCAGCTTCTGCTGGTGCTCCCCCGTCTCTCTGG
AGGCAGTATAGGAGAGAGAGCAAGGATTGAGTCTGAGACTTAAGCACTCGGTCCCAGCTTGCCAGTTCCTGGTTU
TGTGTCCTTGGACAACTACCTAACCTTTCTGAGCCTCCTATACCTCATCCGACACAAATGGGGATGATACCTAC
CTCCAGGGTTGGCGTGAGGATTCATGGGCTATTATAGATGAAAACCTGCACAAGGCCAGAACCAGCAGGCACTCAA
TAAACGTTTCATGTCCTTTTCTCT

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FIGURE 2494

MSEGNAAGEPSTPGGPRPLLTGARGLIGRRPAPPLTPGRLPSIRSRDLTLGGVKKKTFTPNII SRKIKEEPKEEV
TVKKEKRERDRDRQREGHGRGRGRPEVIQSHSIFEQGPAEMMKKGNWDKTVDVSDMGPSHIINIKKEKRETDEE
TKQILRMLEKDDFLDDPGLRNDTRNMPVQLPLAHSGWLFKEENDEPDVKPWLAGEPKEEDMEVDIPAVKVKEEPRD
EEEEAKMKAPPKAARKTPGLPKDVSVAELLRELSLTKEEELLFLQLPDTLPGQPPTQDIKPIKTEVQGEDGQVVL
IKQEKDREAKLAENACTLADLTEGQVGKLLIRKSGRVQLLLGKVTLDDVTMGTACSFQELVSVGLGDSRTGEMTV
LGHVKHKLVCSPDFESLLDHKHR

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FIGURE 2495

GCCGCTTCCCTCGCCGCCGCCGCCGCCAGCATGCCCGGCGTGGCCCGCCTGCCGCTGCTGCTCGGGCTGCTGCTGC
TCCCGCGTCCCGGCCGCCGCCGCTGGACTTGGCCGACTACACCTATGACCTGGCGGAGGAGGACGACTCGGAGCCCC
TCAACTACAAAGACCCCTGCAAGGCGGCTGCCTTTCTTGGGGACATTGCCCTGGACGAAGAGGACCTGAGGGCCT
TCCAGGTACAGCAGGCTGTGGATCTCAGACGGCACACAGCTCGTAAGTCCTCCATCAAAGCTGCAGTTCCAGGAA
ACACTTCTACCCCCAGCTGCCAGAGCACCAACGGGCAGCCTCAGAGGGGAGCCTGTGGGAGATGGAGAGGTAGAT
CCCGTAGCCGGCGGGCGGGCGACGTCCCGACCAGAGCGTGTGTGGCCCGATGGGGTCATCCCCCTTTGTCAATTGGGG
GAAACTTCACTGGTAGCCAGAGGGCAGTCTTCCGGCAGGCCATGAGGCACTGGGAGAAGCACACCTGTGTACCT
TCCTGGAGCGCACTGACGAGGACAGCTATATTGTGTTACCTATCGACCTTGCGGGTGCTGCTCCTACGTGGGTC
GCCGCGGGCGGGGGCCCCCAGGCCATCTCCATCGGCAAGAACTGTGACAAGTTCGGCATTGTGGTCCACGAGCTGG
GCCACGTGCTCGGCTTCTGGCACGAACACACTCGGCCAGACCGGGACCGCCACGTTTCCATCGTTCTGTGAGAACA
TCCAGCCAGGGCAGGAGTATAACTTCCTGAAGATGGAGCCTCAGGAGGTGGAGTCCCTGGGGGAGACCTATGACT
TCGACAGCATCATGCATTACGCTCGGAACACATTCTCCAGGGGCATCTTCTGGGATACCATTTGTCCCCAAGTATG
AGGTGAACGGGGTGAAACCTCCCATTTGGCCAAAGGACACGGCTCAGCAAGGGGGACATTGCCCAAGCCCCGCAAGC
TTTACAAGTGCCAGCCTGTGGAGAGACCCTGCAAGACAGCACAGGCAACTTCTCCTCCCCCTGAATACCCCAATG
GCTACTCTGCTCACATGCCTGCGTGTGGCGCATCTCTGTACACCCGGGGAGAAGATCATCTGAACCTTACGT
CCCTGGACCTGTACCGCAGCCGCTGTGCTGGTACGACTATGTGGAGGTCCGAGATGGCTTCTGGAGGAAGGCGC
CCCPCGAGGCCGCTTCTGCGGGTCCAACTCCCTGAGCCTATCGTCTCCACTGACAGCCGCTCTGGGTTGAAT
TCCGCAGCAGCAGCAATTGGGTTGGAAAGGGCTTCTTTGAGTCTACGAAGCCATCTGCGGGGGTGATGTGAAAA
AGGACTATGGCCACATTCAATCGCCCAACTACCCAGACGATTACCGGGCCAGCAAAGTCTGCATCTGGCGGATCC
AGGTGTCTGAGGGCTTCCACGTGGGCCTCACATTCCAGTCCCTTTGAGATTGAGCGCCACGACAGCTGTGCCTACG
ACTATCTGGAGGTGCGCGACGGGCACAGTGAGAGCAGCACCCCTCATCGGGCGCTACTGTGGCTATGAGAAGCCTG
ATGACATCAAGAGCACGTCCAGCCGCTCTGGCTCAAGTTCGTCTCTGACGGGTCCATTAACAAAGCGGGCTTTG
CCGTCAACTTTTTCAAAGAGGTGGACGAGTGCTCTCGGCCAACCGCGGGGGCTGTGAGCAGCGGTGCCTCAACA
CCCTGGGCAGCTACAAGTGCAGCTGTGACCCCGGTACGAGCTGGCCCCAGACAAGCGCCGCTGTGAGGCTGCTT
GTGGCGGATTCCCTACCAAGCTCAACGGCTCCATCACCAGCCCGGGCTGGCCCCAAGGAGTACCCCCCAACAAGA
ACTGCATCTGGCAGCTGGTGGCCCCACCCAGTACCGCATCTCCCTGCAGTTTGACTTCTTTGAGACAGAGGGCA
ATGATGTGTGCAAGTACGACTTCGTGGAGGTGCGCAGTGGACTCACAGCTGACTCCAAGCTGCATGGCAAGTTCT
GTGGTTCTGAGAAGCCCCGAGGTATCACCCTCCAGTACAACAACATGCGCGTGGAGTTCAAGTCCGACAACACCG
TGTCCAAAAAGGGCTTCAAGGCCCACTTCTTCTCAGAAAAGAGGCCAGCTCTGCAGCCCCCTCGGGGACGCCCC
ACCAGCTCAAATTCCGAGTGCAGAAAAGAAACCGGACCCCCCAGTGAGGCCTGCCAGGCCTCCCGGACCCCTTGT
TACTCAGGAACCTCACCTTGGACGAATGGGATGGGGGCTTCGGTGCCCAACACCCCCACCTCCACTCTGCCA
TTCCGGCCCCACCTCCCTCTGGCCGGACAGAAGTGGTCTCTCTTCTCCCACTGTGCCGCTCCGCGGACCGGGGA
CCCTTCCCCGTGCCCTACCCCTCCCATTTTGATGGTGTCTGTGACATTTCTGTTGTGAAGTAAAGAGGGACC
CCTGCGTCTGC

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FIGURE 2496

MPGVARLPLLLGLLLLPRPGRPLDLADYTYDLAEEDDSEPLNYKDPCKAAAF LGDIALDEEDLRAFQVQQAVDLR
RHTARKSSIKA AVPGNTSTPSCQSTNGQPQRGACGRWRGRSRSRRAATSRPERVWPDGVIPFVIGGNETGSQRAV
FRQAMRHWEKHTCVTFLERTDEDSYIVFTYRPGCCSYVGRRGGGPQAISIGKNCDKFGIVVHELGHVVGFWHEH
TRPDRDRHVSIVRENIQPGQEYNFLKMEPQEVESLGETYDFDSIMHYARNTFSRGIFLDTIVEPKYEVNGVKPPIG
QRTLSKGDIAQARKLYKCPACGETLQDSTGNFSSPEYPNGYSAHMHCVWRISVTPGEKIILNFTSLDLYRSRLC
WYDYVEVRDGFWRKAPLRGRFCGSKLPEPIVSTD SRLWVEFRSSSNWVGKGF FAVYEAICGGDVKKDYGHIQSPN
YPDDYRPSKVCIWRIQVSEG FHVGLTFQSFEIERHDS CAYDYLEVRDGHSESSTLIGRYCGYEKPDDIKSTSSRL
WLKFVSDGSINKAGFAVNFFKEVDECSRPNRGGCEQRCLNTLGSYKCS CDPGYELAPDKRRCEAACGGFLTKLNG
SITSPGWPKEYPPNKNCIWQLVAPTQYRISLQFDF FETEGNDVCKYDFVEVRSGLTADSKLHGKFCGSEKPEVIT
SQYNNMRVEFKSDNTVSKKGFKAHFFSEKRPALQPPRGRPHQLKFRVQKRN RTPQ

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FIGURE 2497

GCCGCTTCCCTCGCCGCCGCCGCCGCCAGCATGCCCGCGTGGCCCCGCTGCCGCTGCTGCTCGGGCTGCTGCTGC
TCCCGCGTCCCGGCCGCCGCCGCTGGACTTGGCCGACTACACCTATGACCTGGCGGAGGAGGACGACTCGGAGCCCC
TCAACTACAAAGACCCCTGCAAGGCGGCTGCCCTTTCTTGGGGACATTGCCCTGGACGAAGAGGACCTGAGGGCCT
TCCAGGTACAGCAGGCTGTGGATCTCAGACGGCACACAGCTCGTAAGTCCATCAAAGCTGCAGTTCCAGGAA
ACACTTCTACCCCCAGCTGCCAGAGCACCAACGGGCAGCCTCAGAGGGGAGCCTGTGGGAGATGGAGAGGTAGAT
CCCGTAGCCGGCGGGCGGGCGACGTCCCGACCAGAGCGTGTGTGGCCCGATGGGGTCATCCCCCTTTGTCAATTGGGG
GAAACTTCACTGGTAGCCAGAGGGCAGTCTTCCGGCAGGCCATGAGGCACTGGGAGAAAGCACACCTGTGTACCT
TCCTGGAGCGCACTGACGAGGACAGCTATATTGTGTTACCTATCGACCTTGGCGGGTGTGCTCCTACGTGGGGTC
GCCGCGGGCGGGGGCCCCCAGGCCATCTCCATCGGCAAGAACTGTGACAAGTTCCGCATTGTGGTCCACGAGCTGG
GCCACGTGCTCGGCTTCTGGCACGAACACACTCGGCCAGACCGGGACCGCCACGTTTCCATCGTTCGTGAGAACA
TCCAGCCAGGGCAGGAGTATAACTTCCTGAAGATGGAGCCTCAGGAGGTGGAGTCCCTGGGGGAGACCTATGACT
TCGACAGCATCATGCATTACGCTCGGAACACATTCTCCAGGGGCATCTTCTGGATACCATTTGTCCCCAAGTATG
AGGTGAACGGGGTGAACCTCCCATTTGGCCAAAGGACACGGCTCAGCAAGGGGGACATTGCCCAAGCCCCGCAAGC
TTTACAAGTGCCAGCCTGTGGAGAGACCTGCAAGACAGCACAGGCAACTTCTCCTCCCTGGAATACCCCAATG
GCTACTCTGCTCACATGCACTGCGTGTGGCGCATCTCTGTACACCCGGGGAGAAGATCATCTGAACTTACGT
CCCTGGACCTGTACCGCAGCCGCTGTGCTGGTACGACTATGTGGAGGTCCGAGATGGCTTCTGGAGGAAGGCGC
CCCTCCGAGGCCGCTTCTGCGGGTCCAACTCCCTGAGCCTATCGTCTCCACTGACAGCCGCTCTGGGTTGAAT
TCCGCAGCAGCAGCAATTGGGTTGGAAAGGGCTTCTTTGCACTCTACGAAGCCATCTGCGGGGGTGATGTGAAAA
AGGACTATGGCCACATTCAATCGCCCACTACCCAGACGATTACCGGGCCAGCAAAGTCTGCATCTGGCGGATCC
AGGTGTCTGAGGGCTTCCACGTGGGCCCTCACATTCCAGTCCCTTTGAGATTGAGCGCCACGACAGCTGTGCCTACG
ACTATCTGGAGGTGCGCGACGGGCACAGTGAGAGCAGCACCCCTCATCGGGCGCTACTGTGGCTATGAGAAGCCTG
ATGACATCAAGAGCACGTCCAGCCGCTCTGGCTCAAGTTCGTCTCTGACGGGTCCATTAAACAAAGCGGGCTTTG
CCGTCAACTTTTTCAAAGAGGTGGACGAGTGCTCTCGGCCAACCGCGGGGGCTGTGAGCAGCGGTGCCTCAACA
CCCTGGGCAGCTACAAGTGCAGCTGTGACCCCGGTACGAGCTGGCCCCAGACAAGCGCCGCTGTGAGGCTGCTT
GTGGCGGATTCCCTACCAAGCTCAACGGCTCCATCACCAGCCCGGGCTGGCCCAAGGAGTACCCCCCAACAAGA
ACTGCATCTGGCAGCTGGTGGCCCCACCCAGTACCGCATCTCCCTGCAGTTTGACTTCTTTGAGACAGAGGGCA
ATGATGTGTGCAAGTACGACTTCGTGGAGGTGCGCAGTGGACTCACAGCTGACTCCAAGCTGCATGGCAAGTTCT
GTGGTTCTGAGAAGCCCCGAGTTCATCCTCCAGTACAACAACATGCGCGTGGAGTTCAAGTCCGACAACACCG
TGTCAAAAAAGGGCTTCAAGGCCACTTCTCTCAGTCTTGGAGGGGGCAGGGGACCGACACTCACATCTATCAG
GCCTGGAGTTACTGCTCTGCCCCATGCCCTGGTCGACACTGTGCCCCCCCCACCCTCAGCCCTGCACGGAGACA
CACACGCCCACACGCACACACATGTGCACACACATTGCCCCATCGCACAAGAAACCTGCAGAGGACCCCCACTGG
GGGCATCGAGGCTCAGCCCTCAGGGCCCGGGCATCTGACTCTGGCCCCCAGGAGGGGAGCTATTTGGACTTTT
GGGACACCCACCGAGGAGACCCTAAGCCAAGAAGGAGAAGAAAGAGCCTGAAGACCTTCACTCTGCCATTCCGGCCC
CCTTCCGGGGCATTTGGGCACTGTAGGAAAAAGAGGCCAGCTCTGCAGCCCCCTCGGGGACGCCCCACCAGCTCA
AATTCGAGTGCAGAAAAGAAACCGGACCCCCAGTGAGGCCTGCCAGGCCTCCCGGACCCCTTGTTACTCAGGA
ACCTCACCTTGGACGGATGGGATGGGGGCTTCGGTGCCCAACCCCCACCTCCACTCTGCCATTCCGGCCC
ACCTCCCTCTGGCCGGACAGAACTGGTGCTCTCTTCTCCCCACTGTGCCGTCCGCGGACCGGGGACCCCTTCCCC
GTGCCCTACCCCTCCCATTTTGATGGTGTCTGTGACATTTCTGTTGTGAAGTAAAAGAGGGACCCCTGCGTCC
TGC

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FIGURE 2498

MPGVARLP LLLGLLLLPRPGRPLDLADYTYDLAEEDDSEPLNYKDPCKAAAF LGDIALDEEDLRAFQVQQAVDLR
RHTARKSS IKA AVPGNTSTPSCQSTNGQPQRGACGRWRGRSRRAATSRPERVWPDGVIPFVIGGNFTGSQRAV
FRQAMRHWEKHTCVTFLERTDEDSYIVFTYRPGCCSYVGRRGGGPQAISIGKNCDKFGIVVHELGHVVGFWHEH
TRPDRDRHVSIVRENIQPGQEYNFLKMEPQEVESLGETYDFDSIMHYARNTFSRGIFLDTIVPKYEVNGVKPPIG
QRTLSKGDIAQARKLYKCPACGETLQDSTGNFSSPEYPNGYSAHMHCVWRISVTPGEKIILNFTSLDLYRSRLC
WYDYVEVRDGFWRKAPLRGRFCGSKLPEPIVSTD SRLWVEFRSSSNWVGKGF FAVYE AICGGDVKKDYGHIQSPN
YPDDYRPSKVCIWRIQVSEGFHVGLTFQSF EIERHDS CAYDYLEVRDGHSESSTLIGRYCGYEKPDDIKSTSSRL
WLKFVSDGSINKAGFAVNFFKEVDECSRPNRGGCEQRCLNTLGSYKSCDPGYELAPDKRRCEAACGGFLTKLNG
SITSPGWPKEYPPNKNCIWQLVAPTQYRISLQFDF FETEGNDVCKYDFEVRSGLTADSKLHGKFCGSEKPEVIT
SQYNNMRVEFKSDNTVSKKGFKAHFFSVLEGAGDRHSHLSGLELLLC PHALVDTVPAPP SALHGDTHAHTH THVH
THCP IAQETCRGPPLGASRLSPQGPGLTLAPQEGSYLDFWDTHRGDPKPRRRRKS LKTFSLTPATFRGIWAL

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FIGURE 2499

GCCAGCATGCCCCGGCGTGGCCCCGCTGCCGCTGCTGCTCGGGCTGCTGCTGCTCCCGCTCCCGGCCGGCCGCTG
GACTTGGCCGACTACACCTATGACCTGGCGGAGGAGGACGACTCGGAGCCCCCTCAACTACAAAGACCCCTGCAAG
GCGGCTGCCTTTCTTGGGGACATTGCCCTGGACGAAGAGGACCTGAGGGCCTTCCAGGTACAGCAGGCTGTGGAT
CTCAGACGGCACACAGCTCGTAAGTCCCTCCATCAAAGCTGCAGTTCCAGGAAACACTTCTACCCCCAGCTGCCAG
AGCACCAACGGGCAGCCTCAGAGGGGAGCCTGTGGGAGATGGAGAGGTAGATCCCGTAGCCGGCGGGCGGCGACG
TCCCCAGCAGAGCGTGTGTGGCCCCGATGGGGTCATCCCCTTTGTCAATTGGGGGAAACTTCACTGGTAGCCAGAGG
GCAGTCTTCCGGCAGGCCATGAGGCACTGGGAGAAGCACACCTGTGTACCTTCTTGGAGCGCACTGACGAGGAC
AGCTATATTGTGTTACCTATCGACCTTGCGGGTGTGTCTCTACGTGGGTGCGCCGCGGGCGGGGGCCCCAGGCC
ATCTCCATCGGCAAGAAGTGTGACAAGTTCGGCATTGTGGTCCACGAGCTGGGCCACGTCGTCGGCTTCTGGCAC
GAACACACTCGGCCAGACCGGGACCGCCACGTTTCCATCGTTCGTGAGAACATCCAGCCAGGGCAGGAGTATAAC
TTCCTGAAGATGGAGCCTCAGGAGGTGGAGTCCCTGGGGGAGACCTATGACTTCGACAGCATCATGCATTACGCT
CGGAACACATTCTCCAGGGGCATCTTCTGGATACCATTTGTCCCCAAGTATGAGGTGAACGGGGTGAAACCTCCC
ATTGGCCAAAGGACACGGCTCAGCAAGGGGGACATTGCCCAAGCCGCAAGCTTTACAAGTGCCAGCCTGTGGA
GAGACCTGTCAAGACAGCACAGGCAACTTCTCTCCCCCTGAATACCCCAATGGCTACTCTGTCTACATGCACTGC
GTGTGGCGCATCTCTGTACACCCGGGGAGAAGATCATCCTGAACCTTCACTGCTCCCTGGACCTGTACCGCAGCCGC
CTGTGCTGGTACGACTATGTGGAGGTCCGAGATGGCTTCTGGAGGAAGGCGCCCTCCGAGGCCGCTTCTGCGGG
TCCAACTCCCTGAGCCTATCGTCTCCACTGACAGCCGCTCTGGGTGAATTCCGCAGCAGCAGCAATTGGGT
GGAAAGGGCTTCTTTGCAGTCTACGAAGCCATCTGCGGGGGTGATGTGAAAAGGACTATGGCCACATTCAATCG
CCCAACTACCCAGACGATTACCGGCCAGCAAAGTCTGCATCTGGCGGATCCAGGTGTCTGAGGGCTTCCACGTG
GGCCTCACATTCCAGTCCCTTTGAGATTGAGCGCCACGACAGCTGTGCCTACGACTATCTGGAGGTGCGCGACGGG
CACAGTGAGAGCAGCACCCCTCATCGGGCGCTACTGTGGCTATGAGAAGCCTGATGACATCAAGAGCACGTCCAGC
CGCCTCTGGCTCAAGTTCGTCTCTGACGGGTCCATTAAACAAAGCGGGCTTTGCCGTCAACTTTTCAAAGAGGTG
GACGAGTGCTCTCGGCCAACC CGGGGGCTGTGAGCAGCGGTGCCTCAACACCCTGGGCAGCTACAAGTGCAGC
TGTGACCCCGGGTACGAGCTGGCCCCAGACAAGCGCCGCTGTGAGGGGTGTTATGATCTACAGGTTGGGAAACCC
CTGTTGTGGGACAGACACTGTTTCCGCCTCTCCACGCATGGTCCCGAGATGCTGGGGACAGCACTCCGAGGCTTAA

TGGCTCCAGCTCACTAGGCCGATCCTGCTGTGCCCCGAGCTGCTCCCTTTCTGACCTCCAGGACCGCCCT
CCCTGAAGTGTCTTCCCTGAGTCCCTTATTCGCGCTCACTCCCTCTTGAGGACCTTGGCCTGTTCAATTTGCAGA
GAAGATAGAAATGGCCACACTTATGACCCCTTAGCTCCCCACTCCTCCCTACAGGCCACCCCTGAGGACACCC
AGGCCACCCCTGCCTCCTCCCGTCCGCCCCAGAGGGACAGACAGGTCCCTGAGCCTTGGGGAGTCCACAGGCT
CCCCATCTTCTCCTTACTGCATCTCAGCCACATCTCAGCCCTTCCCCATGGCAGGGGCTCCCCGAGACGATGC
CACCTTCCCTTGTCCCCGAGCTGCTTGTGGCGGATTCTTACCAAGCTCAACGGCTCCATCACCAGCCCCGGGCTG
GCCAAGGAGTACCCCCCAACAAGAAGTGCATCTGGCAGCTGGTGGCCCCACCCAGTACCGCATCTCCCTGCA
GTTTGACTTCTTTGAGACAGAGGGCAATGATGTGTGCAAGTACGACTTCGTGGAGGTGCGCAGTGGAATCACAGC
TGACTCCAAGCTGCATGGCAAGTTCTGTGGTTCTGAGAAGCCCCGAGGTGATCACCTCCAGTACAACAACATGCG
CGTGGAGTTCAAGTCCGACAACACCGTGTCCAAAAGGGCTTCAAGGCCCACTTCTTCTCAGAAAAGAGGCCAGC
TCTGCAGCCCCCTCGGGGACGCCCCACCAGCTCAAATTCCGAGTGCAGAAAAGAAACCGGACCCCCAG

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FIGURE 2500

MPGVARLP L L L L L L L L L L P R P G R P L D L A D Y T Y D L A E E D D S E P L N Y K D P C K A A A F L G D I A L D E E D L R A F Q V Q Q A V D L R
R H T A R K S S I K A A V P G N T S T P S C Q S T N G Q P Q R G A C G R W R G R S R S R R A A T S R P E R V W P D G V I P F V I G G N F T G S Q R A V
F R Q A M R H W E K H T C V T F L E R T D E D S Y I V F T Y R P C G C C S Y V G R R G G G P Q A I S I G K N C D K F G I V V H E L G H V V G F W H E H
T R P D R D R H V S I V R E N I Q P G Q E Y N F L K M E P Q E V E S L G E T Y D F D S I M H Y A R N T F S R G I F L D T I V P K Y E V N G V K P P I G
Q R T R L S K G D I A Q A R K L Y K C P A C G E T L Q D S T G N F S S P E Y P N G Y S A H M H C V W R I S V T P G E K I I L N F T S L D L Y R S R L C
W Y D Y V E V R D G F W R K A P L R G R F C G S K L P E P I V S T D S R L W V E F R S S N W V G K G F F A V Y E A I C G G D V K K D Y G H I Q S P N
Y P D D Y R P S K V C I W R I Q V S E G F H V G L T F Q S F E I E R H D S C A Y D Y L E V R D G H S E S T L I G R Y C G Y E K P D D I K S T S S R L
W L K F V S D G S I N K A G F A V N F F K E V D E C S R P N R G G C E Q R C L N T L G S Y K C S C D P G Y E L A P D K R R C E G C Y D L Q V G K P L L
W D R H C F R L S T H G P E M L G T A L R G

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FIGURE 2501

GCCAGCATGCCCCGGCGTGGCCCGCTGCCGCTGCTGCTCGGGCTGCTGCTGCTCCCGCGTCCCGGGCCGGCCGCTG
GACTTGCGCGACTACACCTATGACCTGGCGGAGGAGGACGACTCGGAGCCCCTCAACTACAAAGACCCCTGCAAG
GCGGCTGCCCTTTCTTGGGGACATTGCCCTGGACGAAGAGGACCTGAGGGCCTTCCAGGTACAGCAGGCTGTGGAT
CTCAGACGGGCACACAGCTCGTAAGTCTCCATCAAAGCTGCAGTTCCAGGAAACACTTCTACCCCCAGCTGCCAG
AGCACCAACGGGCAGCCTCAGAGGGGAGCCTGTGGGAGATGGAGAGGTAGATCCCGTAGCCGGCGGGCGGGCGACG
TCCCGACCAGAGCGTGTGTGGCCCGATGGGGTCATCCCCCTTTGTCAATTGGGGGAAACTTCACTGGTAGCCAGAGG
GCAGTCTTCCGGCAGGCCATGAGGCACTGGGAGAAGCACACCTGTGTACCTTCCCTGGAGCGCACTGACGAGGAC
AGCTATATTGTGTTACCTATCGACCTTGCGGGTGCTGCTCCTACGTGGGTGCGCGGGCGGGGGCCCCCAGGCC
ATCTCCATCGGCAAGAACTGTGACAAGTTCGGCATTGTGGTCCACGAGCTGGGCCACGTCGTCGGCTTCTGGCAC
GAACACACTCGGCCAGACCGGGACCGCCACGTTTCCATCGTTTCGTGAGAACATCCAGCCAGGCGTTTCTCCACTCT
TCACTGCTCCTTCTCAGCTGTGGCTCTAGAAATGGTGCTTCCCTTCCCATGTTCCTTTGAGTCTCCACTCACCAG
GCCCTCTGCTGGACAGGACTCTTCTCAGACCTCCCCATTCCCCAGGCTCCCCCTTGGCTGCTCCCCGGACCCCTC
AGGGCAGGAGTTAACTTCTGAAGATGGAGCCTCAGGAGGTGGAGTCCCTGGGGGAGACCTATGACTTCGACAG
CATCATGCATTACGCTCGGAACACATTCTCCAGGGGCATCTTCTGGATAACATTGTCCCCAAGTATGAGGTGAA
CGGGGTGAAACCTCCATTGGCCAAAGGACACGGCTCAGCAAGGGGGACATTGCCCAAGCCCGCAAGCTTTACAA
GTGCCCAGCCTGTGGAGAGACCTGCAAGACAGCACAGGCAACTTCTCCTCCCCTGAATACCCCAATGGCTACTC
TGCTCACATGCACTGCGTGTGGCGCATCTCTGTACACCCGGGGAGAAGATCATCCTGAACTTCACGTCCCTGGA
CCTGTACCGCAGCCCGCTGTGCTGGTACGACTATGTGGAGGTCCGAGATGGCTTCTGGAGGAAGGCGCCCTCCG
AGGGCCCAACACTGGCCAGGGATGACAACCTGGTATGGGAGCCAGGAGTCCCTGGCATCATTAGTCCCAGATAGCT
GCATTACTCACTTGCTGCGAGACTTCAGGCCGCTTCTGCGGGTCCAACTCCCTGAGCCTATCGTCTCCACTGAC
AGCCGCTCTGGGTTGAATTCCGCAGCAGCAGCAATTGGGTTGGAAAGGGCTTCTTTGCAGTCTACGAAGCCATC
TGCGGGGTGATGTGAAAAAGGACTATGGCCACATTCAATCGCCCAACTACCCAGACGATTACCGGCCAGCAAA
GTCTGCATCTGGCGGATCCAGGTGTCTGAGGGCTTCCACGTGGGCCTCACATTCCAGTCCCTTTGAGATTGAGCGC
CACGACAGCTGTGCTACGACTATCTGGAGGTGCGCGACGGGCACAGTGAGAGCAGCACCCCTCATCGGGCGCTAC
TGTGGCTATGAGAAGCCTGATGACATCAAGAGCACGTCCAGCCGCCTCTGGCTCAAGTTCGTCTCTGACGGGTCC
ATTAACAAAGCGGGCTTTGCCGTCAACTTTTTCAAAGAGGTGGACGAGTGCTCTCGGCCCAACCGGGGGCTGT
GAGCAGCGGTGCTCAACACCCTGGGCAGCTACAAGTGCAGCTGTGACCCCGGGTACGAGCTGGCCCCAGACAAG
CGCCGCTGTGAGGCTGCTTGTGGCGGATTCTCACCAAGCTCAACGGCTCCATCACCAGCCCGGGCTGGCCCAAG
GAGTACCCCCCAACAAGAACTGCATCTGGCAGCTGGTGGCCCCCACCAGTACCGCATCTCCCTGCAGTTTGAC
TTCTTTGAGACAGAGGGCAATGATGTGTGCAAGTACGACTTCGTGGAGGTGCGCAGTGGACTCACAGCTGACTCC
AAGCTGCATGGCAAGTTCTGTGGTTCTGAGAAGCCCGAGGTATCACCTCCCAGTACAACAACATGCGCGTGGAG
TTCAAGTCCGACAACCCGTGTCCAAAAGGGCTTCAAGGCCACTTCTTCTCAGAAAAGAGGCCAGCTCTGCAG
CCCCCTCGGGGACGCCCCCACCAGCTCAAATTCCGAGTGAGAAAAGAAACCGGACCCCCAG

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FIGURE 2502

MPGVARLPLLLGLLLLPRPGRPLDLADYTYDLAEEDDSEPLNYKDPCKAAAF LGDIALDEEDLRA FQVQQAVDLR
RHTARKSSIKA AVPGNTSTPSCQSTNGQPQRGACGRWRGRSRSRRAATSRPERVWPDGVIPFVIGGNFTGSQRAV
FRQAMRHWEKHTCVTFLE RTDEDSYIVFTYRPGCCSYVGRRGGGPQAISIGKNCDKFGI VVHELGHVVGFWHEH
TRPDRDRHVSIVRENIQPGVLHSSLLLLSCGSRNGASFPCSLESSTHQALCWTGLFLRPSFFPRLPLAAPRTLRA
GV

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FIGURE 2503

GCAAGCCGGAGCCCTGGGGTTGGGCAGCACTCGGTTCCGTGCAACTTTCAAGTGAGTTGCGAACTCCGCCCTGTA
GGCCGGTGCTGGTGGCCCGGCGCGCTGGAACCGCGGCGACCCGCTCCAGCGCGGGACCAGCAGCAAGGGCCGAGC
GCCAGGTTCTCCGCGGCAGAAAGGGCGGGTGGGAGCTGTAACTGCCCCGGCCGCGGGGCGCGCCCGCTCCCAAGT
CGGCTTCTCCCGCGCGGGGCCGCTTTGCCCTCGGGTCTCCCCATTCTCCAGGTCCCCTGAACTGCACAGTCGGAG
GCCGTGGGCGGCGGGCTCTGCCCTCCGCCGAGGGACAGCCGGATCGCCCCCTCTGCTTCCCGCAACTGCCCTGATCA
CCCCCGTCCCAGCCCTTGAGTGAACGTCCTTCTGAGCGGCTTCTGGGGTCTCTCCACGTCCCAAAGGCCGGC
AAGATGGTGTCTGGATGATCTGTGCGCTGGTGGTGTGTTTGGGATGCTGTGTCCAGCTTATGCTTCCTAT
AAGGCTGTGAAGACCAAGAACATTTCGTGAATATGTGCGGTGGATGATGTACTGGATTGTTTTTGCACCTCTTCATG
GCAGCAGAGATCGTTACAGACATTTTATCTCTGTTTCCCTTTCTACTATGAGATCAAGATGGCCTTCGTGCTG
TGGCTGCTCTCACCTACACCAAGGGCGCCAGCCTGCTTTACCGCAAGTTTGTCCACCCGTCCCTGTCCCGCCAT
GAGAAGGAGATCGACGCGTACATCGTGCAGGCCAAGGAGCGCAGCTACGAGACCGTGCTCAGCTTCGGGAAGCGG
GGCCTCAACATTGCCGCTCCGCTGCTGTGCAGGCTGCCACCAAGAGTCAGGGGGCGCTGGCCGGCAGGCTGCGG
AGCTTCTCCATGCAGGACCTGCGCTCCATCTCTGACGCACCTGCCCCCTGCCTACCATGACCCCTCTACCTGGAG
GACCAGGTGTCCCACCGGAGGCCACCCATTGGGTACCGGGCGGGGGCCTGCAGGACAGCGACACCGAGGATGAG
TGTGGTTCAGATACTGAGGCAGTCCCCCGGGCGCCAGCCCGGCCCCGAGAGAAGCCCCCTAATCCGCAGCCAGAGC
CTGCGTGTGGTCAAGAGGAAGCCACCGGTGCGGGAGGGCACCTCGCGCTCCCTGAAGGTTTCGGACGAGGAAAAAG
ACTGTGCCCTCAGACGTGGACAGCTAGGGTCTGCTGCATCTGCCCCCTTCTTACCTCGTGCCCTGCAGGGCTCCA
GGGCTATTTGGAGGGACCTTGGGCTGCACATCTGGCCTGCCTGCACCAGCTGCCTGGGCCCCACCCTCCTGACTC
CTGCTGATGGTTAAGGGCCGGGAGCAGATGCTGCCAAGGCCACATGCAGGGATGCACCCACAATGTACCAAAGCA
GGCTGGGCCCAGGGTTCTATTTATTGCCTTGCTCTGCCCTCTCCCTTCCCCGGTTGTGGGACAAGAGCCCTCCCT
GAACCCCTGCAACCCCTCCCTGAACCCCTGCAAATGAAACCAAACGTCCACCTGGGTGTGTTTCATTCTCTGTC
CTTCAAAGTACTTGATAGCCTTTTATAAGGCCTGGCACATGTGTCTGTTGTGTGTGTGTGTGTGTGGTGAGTGA
GGTCAGGTTTGCAGTGTTTTGATAAATAAATAACATAAAGGGGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAA

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FIGURE 2504

MVSWMICRLVVLVFGMLCPAYASYKAVKTKNIREYVRWMMYWIVFALFMAAEIVTDIFISWFPPFYIEIKMAFVLW
LLSPYTKGASLLYRKFBVHPSLSRHEKEIDAYIVQAKERSYETVLSFGKRGLNIAASAQVQAATKSQGALAGRLRS
FSMQDLRSISDAPAPAYHDPLYLEDQVSHRRPPIGYRAGGLQSDTEDECWSDTEAVPRAPARPREKPLIRSQSL
RVVKKRPPVREGTSRSLKVRTRKKTVPDSDVS

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FIGURE 2505

GA CTGCAATGTGCCGATCTTAGCTGCTGCCTGAGAGGATGTCTGGGGTGTCCGAGCCCCCTGAGTCGAGTAAAGTT
GGGCACGTTACGCCGGCCTGAAGGCCCTGCAGAGCCCATGGTGGTGGTACCAGTAGATGTGGAAAAGGAGGACGT
GCGTATCCTCAAGGTCTGCTTCTATAGCAACAGCTTCAATCCTGGGAAAACTTCAAACCTGGTCAAATGCACTGT
CCAGACGGAGATCCGGGAGATCATCACCTCCATCCTGCTGAGCGGGCGGATCGGGCCCAACATCCGGTTGGCTGA
GTGCTATGGGCTGAGGCTGAAGCACATGAAGTCCGATGAGATCCACTGGCTGCACCCACAGATGACGGTGGGTGA
GGTGCAGGACAAGTATGAGTGTCTGCACGTGGAAGCCGAGTGGAGGTATGACCTTCAAATCCGCTACTTGCCAGA
AGACTTCATGGAGAGCCTGAAGGAGGACAGGACCACGCTGCTCTATTTTACCAACAGCTCCGGAACGACTACAT
GCAGCGCTACGCCAGCAAGGTGAGCGAGGGCATGGCCCTGCAGCTGGGCTGCCTGGAGCTCAGGCGGTTCTTCAA
GGATATGCCCCACAATGCACCTTGACAAGAAGTCCAACCTCGAGCTCCTAGAAAAGGAAGTGGGGCTGGACTTGTT
TTTCCCAAAGCAGATGCAGGAGAACTTAAAGCCCCAACAGTTCCGGAAGATGATCCAGCAGACCTTCCAGCAGTA
CGCCTCGCTCAGGGAGGAGGAGTGCCTCATGAAGTTCTTCAACACTCTCGCCGGCTTCGCCAACATCGACCAGGA
GACCTACCGCTGTGAACCTATTCAAGGATGGAACATTACTGTGGACCTGGTCATTGGCCCTAAAGGGATCCGCCA
GCTGACTAGTCAGGACGCAAAGCCCACCTGCCTGGCCGAGTTCAAGCAGATCAGGTCCATCAGGTGCCTCCCGCT
GGAGGAGGGCCAGGCAGTACTTCAGCTGGGCATTGAAGGTGCCCCCAGGCCTTGTCCATCAAAACCTCATCCCT
AGCAGAGGCTGAGAACATGGCTGACCTCATAGACGGCTACTGCCGGCTGCAGGGTGAGCACCAAGGCTCTCTCAT
CATCCATCCTAGGAAAGATGGTGAGAAGCGGAACAGCCTGCCCCAGATCCCCATGCTAAACCTGGAGGCCCGGCG
GTCCACCTCTCAGAGAGCTGCAGCATAGAGTCAGACATCTACGCAGAGATTCCCAGCAAACCTGCGAAGGCC
CGGAGGTCCACAGTATGGCATTGCCGTGAAGATGTGGTCTGAAATCGTATTCTTGGGGAAGGCTTTTTTGGGGA
GGTCTATGAAGGTGTCTACACAAATCACAAAGGGGAGAAAATCAATGTAGCTGTCAAGACCTGCAAGAAAGACTG
CACTCTGGACAACAAGGAGAAGTTCATGAGCGAGGCGAGTGATCATGAAGAACCTCGACCACCCGCACATCGTGAA
GCTGATCGGCATCATTTGAAGAGGAGCCACCTGGATCATCATGGAATTGTATCCCTATGGGGAGCTGGGCCACTA
CCTGGAGCGGAACAAGAACTCCCTGAAGGTGCTCACCCCTCGTGCTGTACTACTGCAGATATGCAAAGCCATGGC
CTACCTGGAGAGCATCAACTGCGTGCACAGGGACATTGCTGTCCGGAACATCCTGGTGGCCTCCCCTGAGTGTGT
GAAGCTGGGGGACTTTGGTCTTTCCCGGTACATTGAGGACGAGGACTATTACAAAGCCTCTGTGACTCGTCTCCC
CATCAAATGGATGTCCCCAGAGTCCATTAACTTCCGACGCTTCACGACAGCCAGTGACGTCTGGATGTTCCCGCT
GTGCATGTGGGAGATCCTGAGCTTTGGGAAGCAGCCCTTCTTCTGGCTGGAGAACAAAGGATGTATCGGGGTGCT
GGAGAAAGGAGACCGGCTGCCAAGCCTGATCTCTGTCCACCGGTCTTTATACCCTCATGACCCGCTGCTGGGA
CTACGACCCAGTGACCGGCCCGCTTACCGAGCTGGTGTGCAGCCTCAGTGACGTTTATCAGATGGAGAAGGA
CATTGCCATGGAGCAAGAGAGGAATGCTCGCTACCGAACCCCCAAAATCTTGGAGCCACAGCCTTCCAGGAACC
CCCACCCAAGCCCAGCCGACCTAAGTACAGACCCCCCTCCGCAAACCAACCTCCTGGCTCCAAAGCTGCAGTTCCA
GGTTCTTGAGGGTCTGTGTGCCAGCTCTCTACGCTCACAGCCCTATGGAGTATCCATCTCCCGTTAACTCACT
GCACACCCACCTCTCCACCGGCACAATGTCTTCAAACGCCACAGCATGCGGGAGGAGGACTTCATCCAACCCAG
CAGCCGAGAAGAGGCCACGAGCTGTGGGAGGCTGAAAAGGTGAAAATGCGGCAAATCCTGGACAAACAGCAGAA
GCAGATGGTGGAGGACTACAGTGGCTCAGGCAGGAGGAGAAGTCCCTGGACCCCATGGTTTATATGAATGATAA
GTCCCCATTGACGCCAGAGAAGGAGGTGCGCTACCTGGAGTTACAGGGCCCCACAGAAGCCCCGAGGCTGGG
CGCACAGTCCATCCAGCCCACAGCTAACCTGGACCGGACTGATGACCTGGTGTACCTCAATGTCATGGAGCTGGT
GCGGGCCGTGCTGGAGCTCAAGAATGAGCTCTGTGAGCTGCCCCCGAGGGCTACGTGGTGGTGGTGAAGAATGT
GGGGCTGACCTGCGGAAGCTCATCGGGAGCGTGGATGATCTCCTGCCTTCTTGCCGTCTCTTACGGACAGA
GATCGAGGGCACCCAGAAACTGCTCAACAAAGACCTGGCAGAGCTCATCAACAAGATGCGGCTGGCACAGCAGAA
CGCCGTGACCTCCCTAAGTGAGGAGTGCAAGAGGCAGATGCTGACGGCTTACACACCCCTGGCTGTGGACGCCAA
GAACCTGCTCGACGCTGTGGACAGGCCAAGGTTCTGGCCAATCTGGCCACCCACCTGCAGAGTGACGGAGGGT
GGGGGCCACCTGCCTGCGTCTTCCGCCCCCTGCCTGCCATGTACCTCCCCTGCCTTGCTGTTGGTATGTGGGTCT
TCCAGGGGGAAGGCCAAGGGGAGTACCTTCCCTTGCCACTTTGCACGACGCCCTCTCCCCACCCCTACCCCTGG
CTGTACTGCTCAGGCTGCAGCTGGACAGAGGGGACTCTGGGCTATGGACACAGGGTGACGGTGACAAAGATGGCT
CAGAGGGGGACTGCTGCTGCCTGGCCACTGCTCCCTAAGCCAGCCT

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FIGURE 2506

GAATTCCGCCGCTGACCGAGGCGTGCAAAGACTCCAGAATTGGAGGCATGATGAAGACTCTGCTGCTGTTTGTGG
GGCTGCTGCTGACCTGGGAGAGTGGGCAGGTCCTGGGGGACCAGACGGTCTCAGACAATGAGCTCCAGGAAATGT
CCAATCAGGGAAGTAAGTACGTCAATAAGGAAATTCAAATGCTGTCAACGGGGTGAAACAGATAAAGACTCTCA
TAGAAAAAACAAACGAAGAGCGCAAGACACTGCTCAGCAACCTAGAAGAAGCCAAGAAGAAGAAAGAGGATGCC
TAAATGAGACCAGGGAATCAGAGACAAAGCTGAAGGAGCTCCCAGGAGTGTGCAATGAGACCATGATGGCCCTCT
GGGAAGAGTGTAAAGCCCTGCCTGAAACAGACCTGCATGAAGTTCTACGCACGCGTCTGCAGAAGTGGCTCAGGCC
TGGTTGGCCGCCAGCTTGAGGAGTTCTTGAACCAGAGCTCGCCCTTCTACTTCTGGATGAATGGTGACCGCATCG
ACTCCCTGCTGGAGAACGACCGGCAGCAGACGCACATGCTGGATGTCATGCAGGACCACTTCAGCCGCGCGTCCA
GCATCATAGACGAGCTCTTCCAGGACAGGTTCTTACCCGGGAGCCCCAGGATACCTACCACTACCTGCCCTTCA
GCCTGCCCCACCGGAGGCCTCACTTCTTCTTTCCCAAGTCCCGCATCGTCCGCAGCTTGATGCCCTTCTCTCCGT
ACGAGCCCCTGAACTTCCACGCCATGTTCCAGCCCTTCTTGAGATGATACACGAGGCTCAGCAGGCCATGGACA
TCCACTTCCACAGCCCGGCCTTCCAGCACCCGCCAACAGAATTCATACGAGAAGGCGACGATGACCGGACTGTGT
GCCGGGAGATCCGCCACAACCTCCACGGGCTGCCTGCGGATGAAGGACCAGTGTGACAAGTGCCGGGAGATCTTGT
CTGTGGACTGTTCCACCAACAACCCCTCCCAGGCTAAGCTGCGGGCGGAGCTCGACGAATCCCTCCAGGTCGCTG
AGAGGTTGACCAGGAAATACAACGAGCTGCTAAAGTCTTACCAGTGGAAGATGCTCAACACCTCCTCCTTGCTGG
AGCAGCTGAACGAGCAGTTTAACTGGGTGTCCCGGCTGGCAAACCTCACGCAAGGCGAAGACCAGTACTATCTGC
GGGTCACCACGGTGGCTTCCACACTTCTGACTCGGACGTTCTTCCGGTGTCACTGAGGTGGTCGTGAAGCTCT
TTGACTCTGATCCCATCACTGTGACGGTCCCTGTAGAAGTCTCCAGGAAGAACCCTAAATTTATGGAGACCGTGG
CGGAGAAAGCGCTGCAGGAATACCGCAAAAAGCACCGGGAGGAGTGAGATGTGGATGTTGCTTTTGCACCTTACG
GGGCATCTTGAGTCCAGCTCCCCCAAGATGAGCTGCAGCCCCCAGAGAGAGCTCTGCACGTACCAAGTAAC
CAGGCCCCAGCCTCCAGGCCCCCAACTCCGCCCAGCCTCTCCCCGCTCTGGATCCTGCACTCTAACACTCGACTC
TGCTGCTCATGGGAAGAACAGAATTGCTCCTGCATGCAACTAATTCAATAAAACTGTCTTGTGAGCTGAAAAAA
AAAAAAAAAAAAAAAAAAGGAATTC

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FIGURE 2507

MMKTLLLFVGLLLTWESGQVLGDQTVSDNELQEMSNQGSKYVNKEIQNAVNGVKQIKTLIEKTNEERKTLLSNLE
EAKKKKEDALNETRESETKLKELPGVCNETMMALWEECKPCLKQTCMKFYARVCRSGSGLVGRQLEEF LNQSSPF
YFWMNGDRIDSLEENDRQQTHMLDVMQDHF SRASSI IDELFQDRFFTREPQDTHYLPFSLPHRRPHFFFPKSRI
VRSLMPFSPYEPLNFHAMFQPFLEMIHEAQQAMD IHFHSPAFQHPPTEFIREGDDDRTVCREIRHNSTGCLRMKD
QCDKCREILSVDCSTNNPSQAKLRRELD ESLQVAERLTRKYNELLSYQWKMLNTSSLLEQLNEQFNWVSRLANL
TQGEDQYYLRVTTVASHTSDSDVPSGVTEVVVKLFDSDPITVTVPEVSRKNPKF METVAEKALQEYRKKHREE

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FIGURE 2508

ATAGTGACAAGTTTGAAGAAGGTCCAGCTATGGAGGAAGTTCATATGGGAATAGTACTAACAATGTCCCAGCAT
CTTCCTCTACAGCTACAGCTTCCACACAGACGCAGCATTTCGGGAATGTCCCCGTACCTAGCAACAGTTATGACA
CTTCCCCACAGCCTTGCACTACCAATCAAAATGGGAGGGAGAATAATGAGCGATTATCTACATCCAATGGAAAGA
TGTCACCAACTCGCTACCATGCAAACAGCATGGGTCAGAGGTCATACAGTTTTGAAGCCTCAGAAGAGGACCTAG
ATGTAGATGATAAAGTGGAAGAATTAATGAGGAGGGACAGCAGTGTGATAAAAGAGGAAATCAAAGCCTTTCTTG
CCAATCGGAGGATTTCCCAAGCAGTTGTTGCACAGGTAACAGGTATCAGTCAGAGCCGGATCTCTCATTGGCTGT
TGCAGCAGGGATCAGACCTGAGTGAACAGAAGAAAAGAGCATTTTACCGATGGTATCAACTTGAGAAGACAAACC
CTGGCGCTACACTAAGTATGAGACCAGCCCCCATTTCCAATAGAGGACCCTGAATGGAGACAAACGCCTCCCCCAG
TCTCTGCCACATCTGGTACTTTCCGACTGCGACGAGGGAGTCGATTTACCTGGAGAAAGGAGTGCCTGGCTGTTA
TGGAAGTTACTTCAATGAGAATCAATACCCAGATGAAGCAAAGAGGGAAGAAATTGCAAACGCTTGCAATGCAG
TTATACAGAAGCCAGGCAAAAAGCTGTCAGATCTGGAAAGAGTTACCTCCCTGAAAGTATATAATTGGTTTTGCTA
ACAGAAGGAAGGAGATCAAGAGGAGAGCCAATATTGAAGCAGCAATCCTGGAGAGTCATGGGATAGATGTGCAGA
GTCCAGGAGGCCACTCAAACAGTGATGATGTCGACGGGAATGACTACTCTGAGCAGGATGACAGTACGAGCCATA
GTGACCACCAAGACCCCCATCTCATTAGCTGTGGAAATGGCAGCAGTCAACCACACTATCTTGGCATTGGCCCGAC
AAGGAGCCAACGAAATCAAGACAGAGGCCCTGGATGATGACTGATCAGGGAGGTTAAACATGACAAGTTAAGTTA
GTTTAGACGTAGCACCTTAGCAGACTTTTCCTCGGTCCCTTAACATGTGTTCTTACAGTATAACTTGCAGTTTCTTG
TATGT'CAGGTAGCTGTTAGGGTCTTGTTCTGTGTAAGATGGCATGGTGCCTCAGCCTTTGCATATACTCTCTCAG
TATTAAGTCCCAGTAAATAATAACCAACCAACCAACCAACCAAACTTCCCTCTCCCAGCCCCCGAGGCTAGAAAA
TCTTGCTGCTCCGTCTTAGCATTCCAAGAGAGTGCTTCCAGGTATTTAGATAGCCCTCAGTTCTCAAATATTAGA
CTACGTGTAAAAATCTTGGGTACCTTTAGATTCTTGTAACACTAGTCTGTACTCCCTTTTCTTCCCCAAGACTGA
TAGGATGCAAGCTGAGGTGCTGGCACAGGAATGACAGACACCATTTGGGGAGTATCCACAGAGTCAAAGGAACAC
TAGAATCCCCACCTCAGCGTGAGGATAATTGATTTCCAGCTGCAATAAGCCGTGCCTCATTATAGCCACACTGTG
GCTAGATTATACTTCTTTGGGTGCTGTGCTAAGAATGTCAATGGAAAAAGCCGATCTCAGATTTTGTGTTGAAGTT
AACATGCCTGACACAGACATCCTTTCTCTCACAAGCTGTGTGACTTAGTAGATAAAATACTGCCTTCTGCCTTT
GGGACCATGATTAAAAACAAAGACAAAAACCAAAAGTCATTAAAAA

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FIGURE 2509

MSPSPSNSYDTSPQPCTTNQNGRENNERLSTSNQKMSPTRYHANSMSGQSYSFEASEEDLDVDDKVEELMRDSS
VIKEEIKAF LANRRISQAVVAQVTGISQSRISHWLLQQGSDLSEQKKRAF YRWYQLEKTNPGATLSMRPAPIPIE
DPEWRQTPPPVSATSGTFR LRGRSFTWRKECLAVMESYFNENQYPDEAKREEIANACNAVIQKPGKKLSDLERV
TSLKVYNWFANRRKEIKRRANIEAAILESHGIDVQSPGGHSNSDDVDGNDYSEQDDSTSHSDHQDPISLAVEMAA
VNHTILALARQGANEIKTEALDDD

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FIGURE 2510

AGGTGGCGGAGATTGCACCGGAAGACGCTTCCTGGGTTTGAGGAGTTCAGTGAAGTCTATTGAACCAACCAAAAAGT
CCATTATGAAACTGTATTGCCTGTGAGGGCACCAACCTTACCATGCAATGTGCTCAAATTCAAATCAACCACCA
TTATGTTGGACTGCGGACTGGACATGACTTCTACCCTCAATTTCCCTTCCCTTGCCACTTGTTCAAAGTCCCAGGC
TGTCCAATCTTCCCTGGCTGGTCCCTGAAGGATGGAATGCTTTCTTGGACAAGGAGCTAAAGGAGTGCTCGGGTC
ATGTATTTGTGATTCTGTGCCGAATTCTGTTTACCAGAGACGGAGCTAATAGATCTGTCTACAGTAGATGTGA
TTCTCATCTCTAACTATCACTGTATGATGGCGCTGCCATACATCACCGAGCACACCGGCTTCACAGGCACAGTGT
ATGCCACGGAACCCACCGTCCAGATCGGCAGGCTTCTCATGGAAGAGCTGGTGAATTTCAATTGAAAGAGTGCCAA
AGGCTCAGTCTGCCTCCTTGTGGAAGAATAAGGACATTTCAGAGGCTGTACCTTCTCCTCTCAAGGATGCAGTGG
AAGTCTCAACCTGGAGAAGATGCTATACAATGCAAGAGGTGAACCTCTGCCCTTAGTAAAATCCAGCTGGTGGGAT
ATTCTCAGAAAATTGAGCTTTTTGGTGCGGTCCAGGTGACTCCTCTGAGCTCTGGCTATGCCCTTGGGAGCTCCA
ACTGGATCATCCAGTCTCATTACGAGAAAAGTGTCTTATGTCTCTGGATCCTCCTTGCTTACCACACACCCCCAGC
CCATGGACCAAGCTTCTCTCAAAAACAGCGATGTTCTTGTTCTGACAGGGCTTACCCAGATCCCCACTGCAAAAC
CAGATGGAATGGTGGGAGAGTTCTGCAGCAACCTAGCTCTGACAGTCCGGAATGGAGGAAAACGTGTTGGTTCCCT
GCTACCCTTCTGGAGTGATCTATGACCTCCTGGAGTGCCTATATCAGTACATCGACTCAGCCGGGCTTTCCAGCG
CCCCCTCTACTTCTATCTCCCTGTGGCCAACAGTTCACTGGAGTTTTCCAGATCTTTGCTGAGTGGCTTTGTC
ACAACAAACAGAGTAAGGTGTATCTTCCAGAACCACCTTTTCTCATGCAGAGCTCATTAGACCAATAAGCTGA
AGCACTACCCAGCATCCACGGAGACTTCAGCAACGACTTTAGACAGCCCTGTGTGGTGTTACCCGGGCACCCCTT
CCCTCCGCTTCGGGGACGTGGTCCACTTCATGGAGCTCTGGGGAAAATCTAGTCTCAATACCGTCATATTCACGG
AACCAGACTTCTCCTACCTGGAAGCCCTGGCTCCTTACCAGCCGCTGGCCATGAAATGCATCTACTGCCCATCG
ACACCCGGCTGAACTTCATCCAGGTGTCAAAGCTGCTTAAAGAAGTGCAGCCCTGCACGTGGTGTGCTCCTGAGC
AGTACACTCAGCCGCCCCCAGCCAGTCCCACAGGATGGACCTCATGATCGACTGCCAGCCCCCGCCATGTCTT
ATCGGCGGGCTGAGGTTCTCGCCCTGCCCTTCAAACGTCGGTACGAGAAGATCGAGATCATGCCAGAGCTCGCAG
ATTACTGGTGCCCATGGAGATCAAGCCTGGCATCTCCTTGCCAAGTGTCTCGCCGTGCTGCACACCAAAGATA
ACAAGCACTTGCTTCAGCCCCCTCCTCGGCCCGCCAGCCACGAGCGGGAAGAAGAGAAAGCGGGTGAGCGATG
ACGTACCAGACTGCAAAGTCCGTAAGCCTTTGTTGAGCGGTTCCATCCCTGTGGAGCAGTTCGTGCAGACCCCTGG
AGAAGCATGGCTTCAGTGATATTAAGGTGGAGGACACAGCCAAGGGCCATATCGTCTGCTCCAGGAGGCTGAGA
CGTCTATCCAGATTGAAGAAGACTCGACCCATATCATCTGCGACAATGACGAGATGCTCAGAGTGCAGTGCAGG
ACCTTGCTCTCAAATTTCTTACAGAAGTTCTGAGTGGGCCATCTGAGCTACTTCCCTGAAATCCTGCAGTCCCTCA
CTGGCTGCCCTCACAAGCCACCTGAGGAGTGGCATGAGAGGCCATTAAGTGTGTCTTTGTGGTGTCTCTGGCTT
AAGGAGTGAAGAGGTGGCTCTTGAGGGAAATGGTCTGGACTTATCCAGCACTGTTTCAGGCAAGAAGCTTTCCC
TTTCAACTTCAGGCTCATTTTCTTCAACTCTGGCTCTCTCAAGGAGCTGGAGGGTGACAGAAGTGGGACAGGA
GAAGTTTTCCAAGAGGTTTCATGGGAGGCGGAGGTGACTGGCTGGCTGTCTTGATCAGTCCCAGGCCCTCGGCCAG
GGGAGCCAGCCTTTGGTTTCGTTTACTTGCCCTACAGTGCTGTACGCAATAAGATGATGATCCCAAAATATGGTAA
AGTGAACCCATCTGTCTGCATTTTCTACTCTGAGCCCATTTGTTAATAAACACTTATTTTATAT

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FIGURE 2511

MKLYCLSGHPTLPCNVLFKFKSTTIMLDCGLDMTSTLNFLLPLPLVQSPRLSNLPGWSLKDGNFLDKELKECSGHV
FVDSVPEFCLPETELIDLSTVDVILISNYHMMALPYITEHTGFTGTVYATEPTVQIGRLLMEELVNFIERVPA
QSASLWKNKDIQRLLPSPKDAVEVSTWRRCYTMQEVNSALSQIQLVGYSQKIELFGAVQVTPLSGGYALGSSNW
IIQSHYEKVS YVSGSSLLTTHPQPMQASLKNVDLVLTGLTQIPTANPDGMVGEFCSNLALTVRNGGNVLVPCY
PSGVIYDLLECLYQYIDSAGLSSAPLYFISPVANSSLEFSQIFAEWLCHNKQSKVYLPEPPFPHAELIQTNKLKH
YPSIHGDFSNDFRQPCVVFTGHPSLRFQDVVHFMELWGKSSLNTVIFTEPDFSYLEALAPYQPLAMKCIYCPIDT
RLNFIQVSKLLKEVQPLHVVCPEQYTQPPPAQSHRMDLMIDCQPPAMSYRRAEVLALPFKRRYEKIEIMPELADS
LVPMEIKPGISLATVSAVLHTKDNKHLLQPPPRPAQPTSGKKRKRVSDDVPDCKVLKPLLSGSIPVEQFVQTLEK
HGFSDIKVEDTAKGHIVLLQEAETLIQIEEDSTHIIICDNDEMLRVRLRDLVLKFLQKF

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FIGURE 2512

CTGCACAGGGAGTTTGTCTTGTGCAAACAATTTCCAAGGCAGCGTTTTTCTTCCCTGCCTGGGAGTGCAGGGCTCA
GCGCCTTCACTTTGGAAGTGAAGTCAAGAGACCTAAAGAAGCCCACCTGGCCAGCGGGAAGGGGGGCCCGCCGCC
TCCCGGTTTTGGGCAGCCCTGGCCAGCTCCCTGTGGCCTTGGAGGACTTCCACCGGGCAGGCGTTCCCATGATGC
CAGGCTACCAGGCGCGGGGATTCTGTCAGGCCGGCGCTGCTTTTCTTAGAACCCCTTTCTAGAAAAGTACACC
TGGAGGTTTTGCTTCAAAGAGAGGAGAGGCAGCAGCATGGCGAGTGTCTGTCCCGACGCTTGGAAAGCGGTCC
CTCCTGGGAGCCCGGTGTTGGGACCCAGTGCCTCGGAGGGGGCCCTCGGCTGCCCCACCCCTCGGAGCCACTGCTA
GAAGGGGCGCTCCCCAGCCTTTACCACCTCTGATGACACCCCTGCCAGGAGCAGCCCAAGGAAGTCCCTTAAG
GCTCCCAGCACCTCGGGCCTTTCAGCAGGTGGCCTTTTCAGCCTGGGCAGAAAGTTTATGTGTGGTACGGGGGTCAA
GAGTGCACAGGACTGGTGGAGCAGCACAGCTGGATGGAGGGTCAGGTGACCGTCTGGCTGTGGAGCAGAAGCTG
CAGGTCTGCTGCAGGGTGGAGGAGGTGTGGCTGGCAGAGCTGCAGGGCCCCGTGTCCCCAGGCACCCACCCCTGGAG
CCCGGAGCCCAGGCCCTGGCCTACAGGCCCGTCTCCAGGAACATCGATGTCCCAAAGAGGAAGTCGGACGCAGTG
GAAATGGATGAGATGATGGCGGCCATGGTGTGCTGACGTCCCTGTCTGTCAGCCCTGTGTGACAGAGTCCCTCCCGGG
ACCGAGGCCAACTTCTCTGCTTCCCGTGCAGCCCTGCGACCCATGGAAGGAGAGTGGTGACATCTCGGACAGCGGC
AGCAGCACTACCAGCGGTCACTGGAGTGGGAGCAGTGGTGTCTCCACCCCTCGCCCCCACCACCCAGGCCAGC
CCCAAGTATTTGGGGGATGCTTTTGGTTCTCCCCAACTGATCATGGCTTTGAGACCGATCCTGACCCCTTCTCTG
CTGGACGAACCAGCTCCACGAAAAAGAAAGAACTCTGTGAAGGTGATGTACAAGTGCTGTGGCCAACTGTGGC
AAAGTTCTGCGCTCCATTGTGGGCATCAAACGACACGTCAAAGCCCTCCATCTGGGGGACACAGTGGACTCTGAT
CAGTTCAAGCGGGAGGAGGATTTCTACTACACAGAGGTGCAGCTGAAGGAGGAATCTGCTGCTGCTGCTGCTGCT
GCTGCCGCAGGCACCCAGTCCCTGGGACTCCACCTCCGAGCCAGCTCCACCCCCAGCATGACTGGCCTGCCT
CTGTCTGCTCTTCCACCACCTCTGCACAAAGCCCAGTCTCCGGGCCAGAACATCCTGGCCCGGAGTCTCTCCCTG
CCCTCAGGGGCTCTCAGCAAGTCAGCTCCTGGGTCTTCTGGCACATTCAGGCAGATCATGCATACCAGGCTCTG
CCATCCTTCCAGATCCAGTCTCACCACACATCTACACCAGTGTGAGCTGGGCTGCTGCCCCCTCCGCCGCCTGC
TCTCTCTCTCCGGTCCGGAGCCGGTCGCTAAGCTTCAGCGAGCCCCAGCAGCCAGCACCTGCGATGAAATCTCAT
CTGATCGTCACTTCTCCACCCCGGGCCAGAGTGGTGCCAGGAAAGCCCGAGGGGAGGCTAAGAAGTGCCGCAAG
GTGTATGGCATCGAGCACCGGACAGTGGTGCACGGCGTGCCGGTGGAAGAAGGCCTGCCAGCGCTTCTGAGC
TGAGCTGTGCTGCAGGTTCTACTCTGTTCTGGCCCTGCCGGCAGCCACTGACAAGAGGCCAGTGTGTACACAGC
CCTCAGCAGAAACCGAAAGAGAAAGAACGGAACACGGAGTTTGGGCTCTGTTGGCTAAGGTGTAACACTTAAAG
CAATTTCTCCCATTGTGCGAACATTTTATTTTTTAAAAAAA

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FIGURE 2513

MASVLSRRLGKRSLLGARVLGPSASEGPSAAPPSEPLLEGAAPQPFTTSDDTPCQEQPKEVLKAPSTSGLQQVAF
QPGQKVYVWYGGQECTGLVEQHSWMEGQVTVWLLEQKLQVCCRVEEVWLAELQGPCPQAPPLEPGAQALAYRPVS
RNIDVPKRKSDAVEMDEMMAMVLTSLS CSPVVQSPPGTEANFSASRAACDPWKESGDISDSGSSTTS GHWSGSS
GVSTPSPPHPQASPKYLGD AFGSPQTDHGFETDPDPFLLDEPAPRKRN SVKVMYKCLWPNC GKVLR SI VGIKRH
VKALHLGDTVDSDQFKREEDFYYTEVQLKEESAAAAAAAAAAGTPVPGTPTSEPAPT PSMTGLPLSALPPPLHKAQ
SSGPEHPGPESLPSGALS K SAPGSFWHIQADHAYQALPSFQIPVSPHIYTSVSWAAAPSAACSLSPVRSRSLSF
SEPQQPAPAMKSHLIVTSP PRAQSGARKARGEAKKCRKVYGIEHRDQWCTACRWKKACQRFLD

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FIGURE 2514A

ATGCTCCATGCTGCAAGCTGCAAGGAGAGCCCAGGAGGGGTGTCCTCCTGGTGGAAGTTGCGCTTGTGGAAGATG
ATTTATATAAAGAACGAACGAGAAAAAGAAGGAAATCAGATCGAGACCAGCGTTCCGAGCAATTTCCCTCCATGG
AGCAGAGTGCTCTTAAGGAATATGAAAAATTGGAATCACGGACCAGAAGGGTTTTGAGCAACACTTATCAGAAAC
TTATTCACTGCTGCTTCTGATGACAGCATCCCTAATGGAGTCAAGTATCTCATAAATAGGCTTCTTGCTTGA
TTGAAAAGCCGACAGTGGACCCAATCTACATTGCATTATTTGGAAGCACTGGGGCTGGGAAGAGCTCCCTGATCA
ATGCCATCATCCAGCAAGCAATGTTTCTACCAGTGTCTGGAGAAAGCATATGTACTTCTGCAATTGTACAAGTGA
GCTCTGGCTGCTGTGTGACAGTATGAGGCCAAAATCCACCTTCTGTCTGACCAGGAGTGGAGGGAGGAGCTGAAGA
ACCTGACCAAACCTCCTGCATAGGACGGAGGAGCTGAGCAGAGAAGAGGCAGATGCGTGGAACAGGGGATGAGGCAG
TGGAGGAAGCCACCTGGAAGCTACAAATGATTTATGGAATGGGGCAGAGAGTAAGAACTATGAGGAGTTACTGA
GGGCGAAGCCCAAAAGGAAGATCCCCACCTCCAGAGTCATCACCTCAAGGCGGAAGAGGCAGAAAGAGCTGTCCA
TCAAGCTGGACCCCTACATCCGCACACAGAGGAGAGATTGGGATGGAGAGGCCGCTGAGATGCGCATCTGGCCCT
TGATCAAACATGTGGAAGTGACACTTCCCAAATCCGACCTGATCCCAAGGGGTCGTGCTGGTGACATCCCAG
GCACAGGCGACTTCAACAGCAAGAGGGACGAGATGTGGAAGAAAGACCAATTGACAAAGTGTCTAGTGATCTGGGTGA
TCAGCGACATAGAGCGAGTTTCTGGGGGGCAAGCCCACGAAGACCTTCTGAATGAGAGCATCAAAGCCTGCCAGC
GGGGCTTCTGTAGGGACGTGGCCCTGGTGGTCACCAAGATGGACAACTCCACTTGCCAGAATACTTAAGGTCT
CAAAGTTTTAGAACTTCGGGAGAAGAGAAAACAGCAGCTGACTTCAAGGTTCTGGAAGCCTCAGATCTGGTGT
ATACAGTCAGCGCCAGGAGTACTGGCAGCAGGCTCTCCTCACCAGGAGGAAACGGAATCCCTAAGTTAAGAG
AATACATCAGGAAGAGCCTCTTGGACAAGAAGAAGAGGACAGTGACCAAGTATGTGACTGAAGCCTTTGGCCTGT
TGCTCCTCACAGATAGTTTCAACTCCACGCAAAACCTGCCGAATGAACACTTGACATGAGTGTCTGCGGAGAT
TTGCGGAAGAGAAGGTTGAGCTGCTGGAGAAGGCCATCGCACAGTGCTTCGCTGCATGGAGCAGCCTCTGCAAG
AAGGGGTGACGACCGCCAGGACTTCTTACCGCTGCATCCTCAGAGCATGCTTGGTGAGGAGTAAAGGAAACCAAG
CTTTTCATCAGACCTGAAAGCTGTTTGCTGAAAAATGGCATCTATGCCTCCAGGACTCTGGCGAGAATTGATC
TAAATGAAGCCCTCACTCAGCCCGTCTATGACCAGATCGACCTGTTTTTGAAGCATTTTTAGGACGGGGAAGC
CCACTGGTTTCACTCTGATGCCTCACATAGATGCTTTTAAAGCAGTCCCTGCAGGAGATAAGTGCCATCCTCGGGGGCC
TAAGAAGTGGCTGGAATATGATAGCTGCAAAAAAATTTCTGATCCAGGAGATAAGTGCCATCCTCGGGGGCC
TGGAGGACCACATCCTCAGAAGGAAGAGGAGGATCTACGAGTCCCTCACTGCCTCTGTCCAGAGTGACCTGAAGC
TCTGTTACGAAGAGGAGCTCAGATCACGGGCAAAAAAGCGTGTGAGCGGATGAAAGATGCCATCAGAAGAGGAG
TGGACCGCAGGTGGCTGAGGGCATGTTTGAAGGGCCAGGAAGGATGCAGACCAAGTTTTCAGCAGGAGGAGG
TACTCTATGCCACATCCTGGATCCTAGACCCGAGAGGCTCCGGGGAGGAGAGGAAGGAGTGCAAGAGACTG
GAATCGTGGAGAAGGTGAAGGGCAGCATCACCCTATGCTGGCCCTTGCTTCGTCCCAGGGGGATGGCCTCTACA
AGGAGCTTGCAGGGCTGAGCTGCAGGATGGGAGACAATGACAAATGGGACGTGGCCCCCTTCTCAGGAAGGGGAC
AGCTGTTGCAGGGTGTGATGGAGAACAAGCTATGTACCTACACACCGTCAGCGACTGTGACACCAGCTCCATCT
GTGAGGATTCTTTGATGGCAGGAGCCTGTCCAAGCTGAACCTGTGTGAGGATGGTCCATGTCAAAACGGCGGG
CAAGCATCTGCTGTACCCAGCTGGGGTCCCTGTGCGCCCTGAAGCATGCTGTCTGGGGCTCTACCTGCTGGTCT
TCCTGATTCTTGTGGGCATCTTCATCTTAGCAGCCTGCTGCCACGCGTGAGTTCCCGAGAGGACATGACCCAGG
GCTTGCCAGCCCGTGACGCAATTTACCCCTTGATCCTGGGAGGTCCCTGACAGCAGAGGGTCCCTGGTACCTGG
GAACAGCCAGGGACAGAAGCTGGGACCCAGGAGCTGTGACAGAGGGGCTGAGTTGTCTGGGGAGAGCGCTTACC
TGCCCACTCCTGTCCCCGGGGATCGGGACTTCCAGAGGGTGAAGTGTCCAGGCCGCGCAGCTCCCTGACGACC
TGAAGGCCCTGACTCGCAATGTGAACCGGCTGAATGAGAGCTTCCGGGACTTGACAGTGCAGGCTGCTGCAGGCTC
CGCTGCAAGCGGACCTGACGGAGCAGGTGTGGAAGGTGACGAGCGCTGCAGAACCAGTCAGACTCGTTGTCTGG
CGCTGGCGGGCGCAGTGACGCGGCTGGAGGGCGCGCTGTGGGGCTGCAGGCGCAGGCGGTGCAGACCGAGCAGG
CGGTGGCCCTGCTGCGGGACCGCACGGGCCAGCAGAGCGACACGGCGCAGCTGGAGCTCTACCAGCTGCAGGTGG
AGAGCAACAGTAGCCAGCTGCTGCTGAGGCGCCACGCGGGCCTGCTGGACGGGCTGGCGCGCAGGGTGGGCATCC
TGGGCGAGGAGCTGGCCGACGTGGGCGGCGTGTGCGCGGCTCAACCACAGCCTGTCTACGACGTGGCCCTCC
ACCGCACGCGGCTGCAGGACCTGCGGGTGTGGTGAGCAACGCCAGCGAGGACACGCGCCGCTGCGCCTGGCGC
ACGTAGGCATGGAGCTGCAGCTGAAGCAGGAGCTGGCCATGCTCAACGCGGTACCGAGGACCTGCGCCTCAAGG
ACTGGGAGCACTCCATCGCACTGCGGAACATCTCCTCGCGAAAGGGCCACCGGGACCCAAAGGTGATCAGGGG
ATGAAGGAAGGAAGGCAGGCCTGGCATCCCTGGATTGCCTGGACTTCGAGGTCTGCCCGGGGAGAGAGGTACCC

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FIGURE 2514B

CAGGATTGCCCGGGCCCAAGGGCGATGATGGGAAGCTGGGGGCCACAGGACCAATGGGCATGCGTGGGTTCAAAG
GTGACCGAGGCCCAAAGGAGAGAAAGGAGAGAAAGGAGACAGAGCTGGGGATGCCAGTAAGGACATTCTGCTGG
GGCCGTGGGATATGATCATTACACGATTACTCTTGGCCATGCAGTACACATCAGACACTTCAACTGCCTTCTCTT
CAGTTGCTCATATCAGCTGA

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FIGURE 2515

CTTCCTGCCGCCGCGCTTCGCACCTCGCTGCTCCAGCATCTAGGGCATAATTCCAACCTTCCAGCCTGCGACCTGCA
GAGAAAAAAAAAATTACTTATTTTCTTGCCCCGTACATACCTTGAAGTGAGCAAAAAAATTAAATTTTAACCATGA
GGGAAATCGTGACATCCAGGCTGGTCAGCGTGGCAACCAGATCGGTGCCAAGTTCTGGGAGGTGATCAGTGATG
AACATGGCATCGACCCCACTGGCACCTACCACGGGGACAGCGACCTGCAGCTGGACCGCATCTCCGTGTACTACA
GTGAAGCCACTGATGGCAAATATGTTCCCTCGTGCCATACTGGTGGATCTAGAACCCCTTCCCACGTCTCCATTTC
TTTATGCCCTGGCTTTGCCCTCTCACCAGCCATGGAAGCCAGCAGTATCGAGCTCTCACAGTGCCGGAACCTCACC
CAGCAGGTCTTCGATGCCAAGAGCATGATGGCTGCCTGTGACCCCGCCACGGCCGATACCTCACCCTGGCTGCT
GACTTCCGTGGTCGGATGTCCATGAAGGAGGTCGATGAGCAGATGTTTAACGTGCAGAACAAAGAACAGCAGCTAC
TTTGTGGAATGGATCCCCAACAAATATCAAGACAGCTGTCTGTGACATCCCACCTCGTGGCCTCAAGATGGCAGTC
ACCTTCATCGGCAGTAGCACGGCCATCCAGGAGCTCTTCAAGCACATCTCGGAGCAGTTCACTGCCATGTTCCGC
CGGAAGGCCTTCCTCCACTGGTACACAGGCGAGGGCATGGACGAGA

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FIGURE 2516

MREIVHIQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSLQLDRISVYYNEATGGKYVPRAILVDLEPGSHVS
ISLCLALPLSPAVEASSIELSQCRNSPSRSSMPRT

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FIGURE 2517

GCACCTCGCTGCTCCAGCATCTAGGGCATATTCCAACCTTCCAGCCTGCGACCTGCAGAGAAAAAAAAAATTACTT
ATTTTCTTGCCCCGTACATACCTTGAAGTGAGCAAAAAAATTAAATTTTAACCATGAGGGAAATCGTGACATCC
AGGCTGGTCAGCGTGGCAACCAGATCGGTGCCAAGTTCTGGGAGGTGATCAGTGATGAACATGGCATCGACCCCA
CTGGCACCTACCACGGGGACAGCGACCTGCAGCTGGACCGCATCTCCGTGTACTACAGTGAAGCCACTGATGGCA
AATATGTTCCCTCGTGCCATACTGGTGGATCTAGAACCTGGGACCATGGACTCTGTTTCGCTCAGGTCTTTTGGCC
AGATCTTTAGACCAGACAACTTTGTATTTGGTCAGTCTGGGGCAGGTAACAACCTGGGCCAAAGGCCACTACACAG
AGGGCGCCGAGCTGGTTGATTCTGTCTGGATGTGGTACGGAAGGAGGCAGAGAGCTGTGACTGCCTGCAGGGCT
TCCAGCTCCCCGCCACGGCCGATACCTCACCCTGGCTGCTGACTTCCGTGGTCGGATGTCCATGAAGGAGGTGGA
TGAGCAGATGTTTAACGTGCAGAACAAGAACAGCAGCTACTTTGTGGAATGGATCCCCAACAATATCAAGACAGC
TGTCTGTGACATCCACCTCGTGGCCTCAAGATGGCAGTCACCTTCATCGGCAGTAGCACGGCCATCCAGGAGCT
CTTCAAGCACATCTCGGAGCAGTT

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FIGURE 2518

MREIVHIQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSDLQLDRISVYYNEATGGKYVPRAILVDLEPGTMDS
VRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKEAESCDCLOGFQLTHSLGGGTGSGMGT
LISKIREEYPDRIMNTFSVVPSPAEASNMDLVSEYQQYQDATAEEEEEDFGEEAEEEA

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FIGURE 2519

GCACCTCGCTGCTCCAGCATCTAGGGCATATTCCAACCTTCCAGCCTGCGACCTGCAGAGAAAAAAAAAATTACTT
ATTTTCTTGCCCGTACATACCTTGAAGTGAGCAAAAAAATTAAATTTTAACCATGAGGGAAATCGTGACATCC
AGGCTGGTCAGCGTGGCAACCAGATCGGTGCCAAGTTCTGGGAGGTGATCAGTGATGAACATGGCATCGACCCCA
CTGGCACCTACCACGGGGACAGCGACCTGCAGCTGGACCGCATCTCCGTGTACTACAGTGAAGCCACTGATGGCA
AATATGTTCTCTCGTGCCATACTGGTGGATCTAGAACCCTGGGACCATGGACTCTGTTTCGCTCAGGTCCTTTTGGCC
AGATCTTTAGACCCGCCACGGCCGATACCTCACCGTGGCTGCTGACTTCCGTGGTCGGATGTCCATGAAGGAGGT
CGATGAGCAGATGTTTAACGTGCAGAACAAGAACAGCAGCTACTTTGTGGAATGGATCCCCAACAATATCAAGAC
AGCTGTCTGTGACATCCCACCTCGTGGCCTCAAGATGGCAGTCACCTTCATCGGCAGTAGCACGGCCATCCAGGA
GCTCTTCAAGCACATCTCGGAGCAGTTCACTGCCATGTTCCGCCGGAAGGCCTTCCTCCACTGGTACAC

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FIGURE 2520

MREIVHIQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSLQLDRISVYYNEATGGKYVPRAILVDLEPGTMDS
VRSGPFGQIFRPATADTSPWLLSSVVGCP

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FIGURE 2521

CTCCAGCATCTAGGGCATATTCCAACCTTCCAGCCTGCGACCTGCAGAGAAAAAAAAATTACTTATTTTCTTGCC
CCGTACATACCTTGAAGTGAGCAAAAAAATTAAATTTTAACCATGAGGGAAATCGTGACATCCAGGCTGGTCAG
CGTGGCAACCAGATCGGTGCCAAGTTCTGGGAGGTGATCAGTGATGAACATGTCCATGAAGGAGGTCGATGAGCA
GATGTTTAAACGTGCAGAACAGAACAGCAGCTACTTTGTGGAATGGATCCCCAACAATATCAAGACAGCTGTCTG
TGACATCCCACCTCGTGGCCTCAAGATGGCAGTCACCTTCATCGGCAGTAGCACGGCCATCCAGGAGCTCTTCAA
GCACATCTCGGAGCAGTTCACTGCCATGTTCCGCCGGAAGGCCCTTCCTCCACTGGTACACAGGCGAGGGCATGGA
CGAGATGGAGTTACCCGAGGCTGACAGCAACATGAACGACCTCGTCTCTGAGTATCAGCAGTACCAGGATGCCAC
CGCAGAAGAGGAGGAGGATTTCCGGTGAGGAGGCCAAAGAGGAGGCCCTAAGGCAGAGCCCCATCACCTCAGGCTT
CTCAGTTCCCTTAGCCGTCTTACTCAACTGCCCCTTCTCTCCCTCAGAATTTGTGTTTGCTGCCTCTATCTTG
TTTTTTGTTTTTTCTTCTGGGGAGGGTCTAGAACAGTGCCTGGCACATAGTAGGCACTCAATAAATACTTGTTTG
TT

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FIGURE 2522

MREIVHIQAGQQRGNQIGAKFWEVISDEHGIDPTGTYHGDSDLQLDRISVYYSEATDGKYVPRAILVDLEPGTMDS
VRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKEAESCDCLOGFQLTHSLGGGTGSGMGTL
LISKIREEYPDRIMNTFSVVPSPKVSDTVIESYNATLSVHQLVENTDETYCIDNEALYDICFRTLRTTPTYGDL
NHLLRDTMSGVTTCLRFPGQLNADLCKLAVNMVFPRLHFFMPGFAPLTSHGSQQYRALTVPELTQQVFDKSM
AACDPRHGRYLTVAADFRGRMSMKEVDEQMFNVQNKSSYFVEWIPNNIKTAVCDIPPRGLKMAVTFIGSSTAIQ
ELFKHISEQFTAMFRRKAFLHWYTGEGMDEMEFTEADSNMNDLVSEYQQYQDATAEEEEEDFGEEAKEEA

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FIGURE 2523

GGGGACGCCGAGGGCGGCTGCGACGCGCCGAGAGGCCGCGGCTCTCCACCTGTCACCCCTGGCCCTTCTCTGCTT
GGATGGTGTCTTCCTCTCCTCAGCCGAGAATGACTTCGTCCACCGGATCCAGGAGGAAGTGGACCGCTTTCTGCT
GCAGAAGCAGCTGTCAAAGGTTCTTCTTTTCCCCCACTCTCCAGTCGCCTCCGGTACCTGATCCATAGAACAGC
AGAGAATTTTGATCTCTTGAGCAGCTTCTCCGTTGGGGAGGGCTGGAAGAGGAGGACGGTCATCTGTCACCAGGA
CATCAGGGTACCCAGTTCCGATGGCCTCTCTGGCCCCCTGCCGCGCTCCTGCCTCCTGCCCCAGCAGGTACCACGG
TCCTCGGCCCCTCTCCAACCAAGGAGCAGCTGCGGTTCCCCGAGGTGCCCGGGCTGGCCGGTGGTATCGTGGACG
CAAGCCTGACCAGCCTTTGTATGTGCCCCGGGTGCTGCGCAGGCAGGAAGAATGGGGGCTGACCTCTACCTCGGT
GCTCAAGAGAGAGGGCCCCAGCTGGCAGGGACCCAGAAGAGCCTGGAGATGTTGGTGCTGGAGACCCCAACTCTGA
TCAGGGACTCCCTGTGCTGATGACTCAGGGAACAGAGGACCTAAAGGGGCCAGGACAAAGGTGTGAGAAATGAGCC
ACTGCTGGACCCTGTTGGCCCTGAGCCTCTGGGGCCTGAGAGTCAGTCAGGGAAGGGAGACATGGTGGAGATGGC
CACACGTTTTGGGTCCACCCTGCAGCTAGACCTGGAAAAGGGGAAGGAGAGTCTGTTGGAGAAGAGGCTGGTGGC
AGAGGAGGAAGAGGACGAAGAGGAGGTGGAAGAGGATGGCCCCAGCAGCTGCTCGGAGGACGATTACAGTGAGCT
GCTGCAGGAGATCACAGACAACCTGACGAAGAAGGAGATTCAGATAGAGAAGATCCATTTGGACACATCCTCCTT
CGTGGAGGAGCTGCCTGGAGAGAAGGACCTTGCCACGTGGTAGAGATCTATGACTTTGAACCAGCGCTCAAGAC
GGAGGACCTGCTGGCAACGTTTTCTGAGTTCCAAGAGAAGGGGTTTCAGGATTCAGTGGGTGGATGATACTCACGC
ACTCGGCATCTTTCCCTGCCTGGCCTCAGCTGCGGAAGCCCTGACCCGGGAGTTCTCGGTGCTCAAGATCCGGCC
CCTCACACAGGGAACCAAGCAGTCAAAGCTCAAAGCCTTGAGAGGCCAAACTCCTGCGTCTGGTGAAGGAGAG
GCCACAGACAAATGCGACTGTGGCCCGGCGGCTGGTGGCCCGGGCCCTGGGACTCCAACACAAAAAGAAAGAGCG
GCCTGCTGTCCGGGGTCCGCTGCCGCCCTGAGGCCCTGGAGACCCAACTGGCCTGGATCTGCGTCCCGACGTAGCT
GGCGCCCCAACACCATAAGCCTTCACAGACGCCAGAGCAGCCCCGACCACCCTCGAGCTTCACCATGGGGTGT
GGTGGGCTTTAGTTTGTCTCCAGAAATGGAGAAAAATAAAAACTCACGTTGTTCT

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FIGURE 2524

MTQGTEDLKGPQRCENEPLDPVGPEPLGPESQSGKGDVEMATRFGSTLQLDLEKGKESLLEKRLVAEEEEDE
EEVEEDGPSSCEDDYSELLQEITDNLTKKEIQIEKIHLDTSSFVEELPGEKDLAHVVEIYDFEPALKTEDLLAT
FSEFQEKGFRIQWVDDTHALGIFCLASAAEALTREFSVLKIRPLTQGTKQSKLKALQRPKLLRLVKERPQTNAT
VARRLVARALGLQHKKKERPAVRGPLPP

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FIGURE 2525

CAGGTACCTGGGGGTGGTTAAGTTGGTGACATGGCTCAGAAGTTTATTTCTTTAAATTTTTTAAGTTTTTTTTTCTT
TTTAGTCTTCAGAAAGGCAACAGTAGTCTTTTAAACGTCACTGTTAAAGTGTAAGACTCTTTTACTCCCTGAGAG
TCCCCCTTTCCCTTTCTTGGCTCCTTTCTCTTTAATTCTTTTTTTTTTTTTTTTTTTTTTACTGAGACGGAGTCTCAC
TCTGTGCCCCAGGCTGGAGTGCAGTGGCGCGATCTCGGCTCACTGCAAACCTCCGCCTCCCGGGTTCACCCCTTCT
CTTTATTCTTATCCCGGTOAGACTCGCCCCCTCTCCAAGACATCTCTCTGTTTTATTTTATTTGATTTTAGTTC
TCTTTGGGTGATCGCTCCTTCCCTCTTCAACGGATCCCTCCCCGCCTCCATCCTCGTTCGTGGGAGAGACCAGC
CTTCTGGTGCTGCAGTCAGGAATGGAGCTTGACAGCGCTCTGGAAGCCCCATCGCAGGAAGACTCTAATTTGTCC
GAGGAGTTGTCTCACTCCGCCTTTGGACAGGCCTTCTCCAAGATTTTACACTGTCTTGCCCCGCCCGAGGCACGA
CGAGGCAATGTAAAAGATGCAGTTCTTAAAGACCTCGGTGATCTAATAGAAGCCACAGAATTTGATAGGTTATTT
GAGGGGACTGGTGCACGGCTCCGCGGAATGCCGGAGACACTGGGGCAGGTAGCAAAAGCCCTGGAGAAGTATGCA
GCCCCCTCCAAGGAGGAGGAAGGTGGAGGTGATGGGCACTCCGAAGCGGCCGAGAAAGCAGCCCAAGTTGGGTTA
CTGTTTCTTAAACTGTTAGGGAAAGTTGAGACTGCTAAGAATTCCCTGGTCGGCCCTGCATGGCAGACGGGCCTG
CATCACTTGGCAGGACCCGTTTATATTTTGGCATCACACACAGCTTGGAGCAACCATGGACCACTCCGAGATCT
CGGGAAGTTGCTAGGGAGGTGCTCACCTCACTGCTTCAAGTTACTGAATGCGGTTCTGTGGCAGGATTCCTACAT
GGAGAAAATGAAGATGAGAAAGGGAGACTTTCGGTGATACTAGGGCTTCTCAAACCCGACTTGTATAAGGAATCC
TGGAAGAATAACCTGCCATCAAACATGTTTTCTCATGGACTCTGCAACAGGTCACTCGGCCCTGGCTGAGCCAG
CATCTGGAAGGGTACTTCCCGCATATTGGTCATTTCAGATGACTATCAGACTGAGAACAAAATCCTGGGTGTA
CACTGTCTCCATCACATTGTGCTTAATGTG

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FIGURE 2526

ATGTCCGGGGGCAGCAGCTGCAGCCAGACCCCAAGCCGGGCCATCCCCGCCACTCGCCGGGTGGTGCTCGGCGAC
GGCGTGCAGCTCCCGCCCGGGGACTACAGCACGACCCCGGCGGCACCGTCTTCAGCACCACCCCGGGAGGTACC
AGGATCATCTATGACCGGAAATTCCTGATGGAGTGTGCGGAATCACCTGTGACCAAAACACCCCAAGGGATCTG
CCCACCATTCGGGGGTACCCAGCCCTTCCAGTGATGAGCCCCCATGGAAGCCAGCCAGAGCCACCTGCGCAAT
AGCCCAGAAGATAAGCGGGCGGGCGGTGAAGAGTCACAGTTTGAGATGGACATTAA

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FIGURE 2527

AAGTGTCCCTCCTACTTCTTGCTGCCTCACGGTTGCTGTTGCAGACCCAGGAGTCTCTGAAGGCTTCCGCGGCT
TTGGGGCCGGTTGTGAGATGCCAGGCAGAGGCCGCTGCCCGGACTGCGGCTCCACGGAGCTGGTGGAAGACTCGC
ACTATTCGAGAGCCAGCTGGTGTGCTCCGACTGCGGCTGCGTGGTCACCGAGGGGGTCCTTACCACTACCTTCA
GCGACGAGGGCAATCTCCGAGAGGTAACATATTCCCGAAGCACAGGGGAAAACGAACAAGTTAGTCGCAGCCAGC
AACGAGGTCTCCGGCGAGTGAGAGACCTTTGTGAGTTCTGCAGTTGCCACCAACATTTGAGGATAACCGCGGTTG
CCTACTACCAACAGGCATATCGGCACTCTGGCATCCGAGCGGCCAGGCTGCAAAAAGAAGGAGGTGTTGGTTGGGT
GCTGCGTCTTAATCACCTGCCGACAGCATAACTGGCCCCCTAACAAATGGGGGCCATCTGCACGCTGTTGTATGCAG
ATTTGGATGTGTTTTCTAGCACTTGCATGCAGATAGTGAAGCTCCTGGGACTGGATGTGCCATCTCTGTGCTTGG
CAGAACTGGTGAAGACCTATTGCAGCAGCTTCAAACCTGTTCCAAGCTTCACCTTCTGTGCCAGCCAAATACGTGG
AAGACAAAGAGAAGATGCTGTCTCGAACAATGCAGTTGGTGGAGCTGGCAAATGAGACGTGGCTGGTGACCGGGA
GGCATCCCTTGCCCGTCATCACTGCTGCGACTTTCCCTGGCTTGGCAGTCGCTGCAGCCTGCAGATCGGCTTTCAT
GTTCCCTTGCCCGATTTTGTAAATTGGCAAATGTGGACCTGCCCTACCCGGCGTCCCTCCCGCCTGCAGGAGCTGC
TGGCTGTGCTGCTGCGGATGGCTGAGCAGCTGGCCTGGTTACGAGTTCTGAGACTTGACAAACGGTCTGTGGTGGA
AGCACATCGGTGACCTTCTCCAGCACCGCCAGTCACTGGTCCGCTCTGCCTTTCGGGATGGGACAGCAGAAGTGG
AGACCCGAGAGAAGGAGCCACCGGGGTGGGGACAGGGGCAAGGAGAAGGGGAGGTGGGAAATAATTCCCTTAGGTT
TACCCAGGGGAAGCGGCCGCGCCAGTCTGCCCTTCTCTTGCCACCTGCATGTTGAAGTCCCGAAGCGGATCT
GCCCTGTACCCCTGTCTCCACTGTCACTGGAGATGAGAACATTTCTGATAGTGAATAGAACAGTATTTGCGTA
CCCCCTCAGGAAGTTAGGGACTTTCAGAGAGCCAGGCTGCTAGACAGGCTGCCACGAGTGTCCCTAACCCCTCCCT
GATGGATATCCACTGGGAGCACTTCATCCTGTTCTGACAGCTTGATAACATTCCTGTTATAACCAAGGATGGAAG
TGTACACAGTCCGTAGGTATTGCTTTTCTTGTGTTGAAGGAACCAAGAGGGGCTCTGCCATTAGTTGGACCCCTGG
GTCCTGGAGTAAAGTCAGGAGTGCAGGGATGACTATAGGTAGGAGAGATTCCCATCCCTTGGTGTGGGAGAGCAA
GTTGCCTATGTCCATGTTCTGTGAGATGGCTTTCCTCATAGATGGATGGGAAATGTCAGGCTCTTTGCTGCTGG
TTTGAATTGGACACACTGCTGCGGCTCCTCCTGCAGGCCTGAGGGGGCTTCCCTCTGCTTGTGGAGTGGTTGGCA
TTCCCAGCAGTATCAACCCTCAGAGGAGCGGGAACCTGGGGAATTCCTGGCCCTACGTGCATTACAGGCAATGATG
GGTTTGTGTGATGGTGTGATGAGATCCTCTACCTCATAACAAAAGGACAGTGGGTAGACTAAGGCAGTAGCTCA
AAGGGCTTTGCAAAATTTAATATATTAAACAAGAGGCATCTGCTAGAAAACATTCTATTGTATAAAACCCGAG
TTCTT

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FIGURE 2528

MPGRGRCPDCGSTELVEDSHYSQSQLVCSDCGCVVTEGVLTITTFSDGNLREVTYSRSTGENEQVSRSQQRGLRR
VRDLCRVLQLPPTFEDTAVAYYQQAYRHSGIRAARLQKKEVLVGCCVLI TCRQHNWPLTMGAICTLLYADLDVFS
STYMQIVKLLGLDVPSLCLAELVKTYCSSFKLFQASPSVPAKYVEDKEKMLSRTMQLVELANETWLVTGRHPLPV
ITAATFLAWQSLQPADRLSCSLARFCKLANVDLPYPASSRLQELLAVLLRMAEQLAWLRVLRDKRSVVKHIGDL
LQHRQSLVRSAFRDGTAEVETREKEPPGWGQGQGEVGNNSLGLPQGKRPASPALLLPFCMLKSPKRICPVPPV
STVTGDENISDSEIEQYLRTPEVRDFQRAQAARQAATSVPNPP

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FIGURE 2529

TTCATTGCGCCAGTGACTAAAAAGAGAATTAAATATGGGTGATGTTGAGAAAGGCAAGAAGATTTTATTATGAA
GTGTTCCCAAGTGCCACACTGTTGAAAAGGGAGGAAAGCACAAAGATTGGGCCAAATCTCCATGGTCTTTTCAGGTG
GAAGACAGGTGAGGCCCTGGATACTCTTACACAGCCGCCAATAAGAACAAATGCATCATCTGGGGAGAGGATAC
ACTGATGGAGTATTTGGAGAATCCCAAGAAGTACATCCCTGGAACAAAAATGATCTTTGTCAGCATTAAAGAAGAA
GGAAGAAAGGGCAGACTTGATAGCTTATCTCAAAAAAGCTACTAATGAGTAATAATTGGCCACTGCCTTATTAT
TACTACACCAGAATTCAGATCATGAATGACTGACAGAATATTTT

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FIGURE 2530

GCGACCCTCTTCTTTGCGTAGAGTTTTTCAGGTTGCTCCTGGAAACCATGCCGAAAGTAGTGTCTCGGTCAGTAG
TCTGCTCTGACACTCGGGACCGGGAGGAATATGACGACGGCGAGAAGCCCCCTCCATGTGTACTACTGTTTGTGCG
GCCAGGTGGTCTAGTGTCTGGACTGTCAGTTAGAGAAATTGCCCATGAGGCCCGGGACCGGTCCCGTGTGATTG
ATGCTGCCAAACATGCCATAAGTTTTGTAACACAGAAGACGAAGAGACTATGTATCTGCGGAGACCTGAAGGCA
TTGAACTACAGTACAGAAAGAAATGTGCAAAGTGTGGACTGCTGCTCTTCTACCAATCCCAGCCGAAGAATGCTC
CCGTTACCTTTCATTGTGGATGGAGCAGTCGTCAAGTTTGGCCAGGGCTTTGGGAAAACGAACATATATACTCAGA
AACAAGAGCCTCCTAAGAAGGTGATGATGACCAAACGGACCAAAGACATGGGCAAGTTCAGTTCTGTCACTGTGT
CTACCATTGATGAAGAGGAAGAGGAGATTGAGGCTAGGGAAGTTGCTGACTCGTATGCACAGAATGCCAAAGTGA
TTGAAAACAGCTGGAGCGCAAAGGCATGAGCAAGAGGCCACTGCAAGAGCTGGCTGAATGGGAACCCAGGAAA
AGTGAAAATGAAGGGGACCCTTGATTGACAACCAGTTCAAATAACCAGGCTTTTTTCTGAGCCCTAGACTGGAG
GCAAGCATTTAGATCAGGAGACAAAGTAACTTCTTGATTACATAGACTGGTTCCTATTTATATCCCAGCAGAAGG
CTTTATGTTGTTTCCCATTGATTCTCCTACATGCAGTGAGGTCTTTAACTGAGTCCATTTGACCTGCTTCT

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FIGURE 2531

GGCGGCGGCAAGGGCGGGAGGGAGCGGTCGCCGCGGGATTTGGAGCTGCCTAGCCTCGCGGTCGCTTTGGCAGCA
TGTAAGCAGCTGTTTGCCAAGAACCCAGGTCACCTGCTAAGAAAGGGTGCCTTCGGGAGAAGAGTGTCAGAGGAT
ACCAATGCCAGATGCATCTGGAGTTACACTCAGCACTCGCAGTATGAGACATTGTGTGCCAGCATCTCTTTCCCTT
CTGGCAAAGACTGTAGCTCTCCAGGTAGGAGGATCCTGGAAGCTGTGAGCACCAGGAGCCTTGCCAGAGGAGGAT
GGGGCCAGATATGAACCTCTACCATGAACATGGTTCTCGGCTTATGAAGGAATTTTAAGTAAAAACAGTTATTTA
ATTTCCACATATTCAAGTCAAAAGCCTTCTGTGTGAAGTGCCAGTGATTACCCCTCCACAGGAGTTATCAGGATT
TTTCTGGCACCAAGTTTAATTCTTCTTCTGACTTCTGGTAGTGACAGATCTGCAGGACAGATTATCTGTTGAAT
GCTCTTGGGCAGGAAAACCATGTAAACCTCTGGAAGCAGCATCAGGACAGCAGAGCAGAGCCCCGTCCTCACT
GCTCACTTGCACAGAACTCCATCTGGACTCGGATGCTTTTACTGAAGACCCATCTAGCTTCAATCATCTTTAGA
GTCCATCCATTCTGGAGAGACCTGGCGTTTGCAGTTGCCTCCTGTGGCCGTGTTTTCTGTCAATTCTGTTCCCAG
GCCTTCTATTAGGCGGTTGAAGGGTGTGGACTTTGGAATGGGGTTGCTGTTCTTCGGGAACCTGCTTCCTTTC
CCTGGCTGGTGTCTGTCAGGAAGGACCATCTGAAGGCTGCAATTTGTTCTTAGGGAGGCAGGTGCTGGCCTGGCCT
GGATCTTCCACCATTGTTTCTGTTGCTGCCTTTTGATAGCCTGATTGTCAACCTTCTGGGCATCTCCCTGACTGTC
CTCTTACCCTCCTTCTCGTTTTATCATAGTGCCAGCCATTTTGGAGTCTCCTTTGGTATCCGCAAACTCTAC
ATGAAAAGTCTGTAAAAATCTTTCGTGGGCTACCTTGAGAAATGGAGCGAGGAGCAAGGAGAAGAACCCAG
CTTTACAAGCCCTACACCAACGGAATCATTGCAAAGGATCCCACTTCACTAGAAGAAGAGATCAAAGAGATTGCT
CGAAGTGGTAGTAGTAAGGCTCTGGACAACACTCCAGAGTTCGAGCTCTCTGACATTTTCTACTTTTGCCGGA
GGAATGGAGACCATTATGGATGATGAGGTGACAAAGAGATTCTCAGCAGAAGAACTGGAGTCTGGAACCTGCTG
AGCAGAACCAATTATAACTTCCAGTACATCAGCCTTCGGCTCACGGTCTCTGTTGGGGTTAGGAGTGTGATTGCG
TACTGCTTCTGCTGCCGCTCAGGATAGCACTGGCTTTCACAGGGATTAGCCTTCTGGTGGTGGGCACAACTGTG
GTGGGATACTTGCCAAATGGGAGGTTTAAGGAGTTCATGAGTAAACATGTTCACTTAATGTGTTACCGGATCTGC
GTGCGAGCGCTGACAGCCATCATCACTACCATGACAGGGAAAACAGACCAAGAAATGGTGGCATCTGTGTGGC
AATCATACCTCACCGATCGATGTGATCATCTTGCCAGCGATGGCTATTATGCCATGGTGGGTCAAGTGCACGGG
GGACTCATGGGTGTGATTACAGAGGCCATGGTGAAGGCTGCCACACGTCTGGTTTGAGCGCTCGGAAGTGAAG
GATCGCCACCTGGTGGCTAAGAGACTGACTGAACATGTGCAAGATAAAAGCAAGCTGCCTATCCTCATCTTCCCA
GAAGGAACCTGCATCAATAATACATCGGTGATGATGTTCAAAAAGGGAAGTTTTGAAATTGGAGCCACAGTTTAC
CCTGTTGCTATCAAGTATGACCCTCAATTTGGCGATGCCTTCTGGAACAGCAGCAAAATACGGGATGGTGACGTAC
CTGCTGCGAATGATGACCAGCTGGGCCATTGTCTGCAGCGTGTGGTACCTGCCCTCCCATGACTAGAGAGGCAGAT
GAAGATGCTGTCCAGTTTGCGAATAGGGTGAAATCTGCCATTGCCAGGCAGGGAGGACTTGTGGACCTGCTGTGG
GATGGGGGCCCTGAAGAGGGAGAAGGTGAAGGACACGTTCAAGGAGGAGCAGCAGAAGCTGTACAGCAAGATGATC
GTGGGGAACCAACAAGGACAGGAGCCGCTCCTGAGCCTGCCTCCAGCTGGCTGGGGCCACCGTGCGGGGTGCCAAC
GGGCTCAGAGCTGGAGTTGCCGCCGCCGCCCCACTGCTGTGTCTTTCCAGACTCCAGGGCTCCCCGGGCTGCT
CTGGATCCCAGGACTCCGGCTTTCGCCGAGCCGACGCGGGATCCCTGTGCACCCGGCGCAGCCTACCTTGGTGG
TCTAAACGGATGCTGCTGGGTGTTGCGACCCAGGACGAGATGCCTTGTCTTTTACAATAAGTCTGTTGGAGGAA
TGCCATTAAAGTGAACCTCCCCACCTTTGCACGCTGTGCGGGCTGAGTGGTTGGGGAGATGTGGCCATGGTCTTGT
GCTAGAGATGGCGGTACAAGAGTCTGTTATGCAAGCCCGTGTGCCAGGGATGTGCTGGGGGCGGCCACCCGCTCT
CCAGGAAAGGCACAGCTGAGGCACTGTGGCTGGCTTCGGCTCAACATCGCCCCAGCCTTGGAGCTCTGCAGAC
ATGATAGGAAGGAAACTGTCATCTGCAGGGGCTTTAGCAAAATGAAGGGTTAGATTTTTATGCTGCTGCTGATG
GGGTACTAAAGGGAGGGGAAGAGGCCAGGTGGGCGCTGACTGGGCCATGGGAGAAGCTGTGTTCTGACTCCA
GGCTAACCTGAACTCCCCATGTGATGCGCGCTTTGTTGAATGTGTGTCTCGGTTTCCCCATCTGTAATATGAGT
CGGGGGGAATGGTGGTGATTCTACCTCACAGGGCTGTTGTGGGGATTAAAGTGTGCGGGTGAGTGAAGGACAC
ATCAGTTTCAAGTGTGTTCAAGTACAGGCCACAAAACGGGGCACGGCAGGCCTGAGCTCAGAGCTGCTGCACTGGG
CTTTGGATTTGTTCTTGTGAGTAAATAAACTGGCTGGTGAATG

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FIGURE 2532

MFLLLPFDSLIVNLLGISLTVLFTLLLVFIIVPAIFGVSF GIRKLYMKSLLKIFAWATLRMERGAKEKNHQLYKP
YTNGIIAKDPTSLEEEIKEIRRS GSSKALDNTPEFELSDIFYFCRKGMETIMDDEVTKRFS AEELESWNLLSRTN
YNFQYISLRLTVLWGLGVLIRYCFLLPLRIAL AFTGISLLVVGTTVVGYPNGRFKEFMSKHVHLMCYRICVRL
TAIITYHDRENRPNGGICVANHTSPIDVILASDGY YAMVGQVHGGLMGVIQRAMVKACPHVWFERSEVKDRHL
VAKRLTEHVQDKSKLPILIFPEGTCINNTSVM MFKKGSFEIGATVYPVAIKYDPQFGDAFWNSSKYGMVTYLLRM
MTSWAIVCSVWYLP PMTREADEDAVQFANRVKSAIARQGGLVDLLWDGGLKREKVKDTFKEEQQKLYSKMIVGNH
KDRSRS

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FIGURE 2533

GAACCCCTAGGTTGTTGGATGATGTCAGCTTCCATCCTTGTGTTTCGTTTCAAACGCTGGGAATCTGAGCGCATCCT
CTCCTTCATCCTCCTGATGGAACTTCCGCCTGCTGTCTTACCATGTCAGTGCACAGAACTCTGGTTGCAATCCC
AGTGTATGTCAAACATAACATCAGTTTCCGGGACAGTAGTTCCCTTGGACGCTTTGAAATAACGGTGGGACCCAA
GCAGACGATGGGGAAGACCATTGAGGGAGTGATTGTCACCAGCCAGATGCCCAAGGGGGTCTGAAACATGAGCCT
TACTCCATCACAGGGGACACACACATTTCGACCCAGTCACAAAGATGCTGTCTTGGGATGTAGGAAAAATAAATCC
ACAAAAGCTACCAAGTTTGAAGGGGACCATGAGTCTTCAGGCTGGAGCTTCCAAACCAGATGAAAACCCCACAAT
TAACCTGCAGTTTAAAGATCCAGCAGCTGGCCATTTCTGGACTCAAGGTGAATCGTCTGGATATGTATGGAGAAAA
GTACAAACCCCTTTAAGGGCATAAAATACATGACCAAAGCTGGGAAGTTCCAAGTTCGAACCTGAAGGGAGCATT
GCTGAGGGAATAGTCTTGACATTTTTCTATTTCTTACTTGTCTAAAAAGTAAAAAATAATCAGCCTGTCTCCT
AGGTCAGTCCCCTCCTGGACCCACCGCTCCCTTTTTCTTAGCCTTCAGTGCCATGGAACATAATCAAGGGAGG
AAAAGGTCACCAGGGAGAACTGGACAGAACTGAAACACAGCAACACCAAGTTCTCAAGGACAAGGTGTGTGATGGG
GGTAGGAAGCTTGGTGCTTATGTAACATTTTAAACGTGGTTTCTATAGGAAAGACCAACATTTGTTTAGCTTGC
TTGGCTTTAATTATCTAAAGCCAATGAAAGACTTCTTTGTTGATTTTTTAAGATAGAAAGATTAAAAAGAAAGAA
AGATGGGAAGAAATGAATGTTAGTCAAGGAAAGGCCACTTAAGGATCTGCTCTATGAAGGAGAAGAAAGAGGAA
AAAGAAGTAAAGGAGTTAGGAGGAGACACTTAAATGAAAGATTGGCAAGAAAAGCAGTCGGACTCTACCTTAAGG
AGGGATGGGAAGGAAAGAGTTGAGTTGGTTTCTTTCTGATTCTCTACTCATGTAGAAAACACTTGTACTTCTGG
AAATGGACTGGAGACTTTTTAAATTTGAGTCCACTATTGACATGGAAACCCAGTGAATCAGATTTTCCCTCAA
AGACCATGATGGTATCGGACTAGTTTTGACACACTGCCTGTTGCTGTCCATCAGCACTTGGTCTCTTATCTTCAG
TGAGAAGGTGACCCGCCTTCTTCCCATGGTGGCTGCCTAAAGTGCTTCTTTCTAACCCAAAACAGTTCTACTCA
CTTCTTTTACAGAATTACCCGGCCATTTTCTGTTACCTGATCCTTCTACAGGATTTTTAAAAAGTAAGAGAGT
TTCAGAGAAGCCGATCCCATAAATCCCCAGTGCAGCCAGGGTTTGTGTGTCATCGTACTGGAGTAGAGGGCCGACT
CTTCCCATGAAGGTGAGCACAGCTGTGAGTGAGTGAGCTCATATCTCCATTTGTGAGTGTGGACTGGTACCAGA
TCGTAACTTCCCGTTGGTCGAAACTTTTCCATCTGTGCGCCCTAGAAAAAGAGAAAGCTTACCATCGAGGGTGT
GGTTGATCCTTGAAGCTGCTTGGTAAAGTTATCATTTCCTCAGTCTTTTCTTTTGTACTCCTATCATGTATTAT
TAATATCTACCAAGTCCCTTTTCAATTCTAAGACAAAACATTTCTCCTAAATCTCTGAATAAAATCAGTGCTGTAGG
AAGATGGACTGTGTTGATCATGGGTGTAAGCAACCCAGTTTAAGAAACATGGCAACTAAAGGGATACCTCAGGCT
TTCTTTCCAGTGGGTCATTTTTGTCTAGTTTCAAGTGTGTCTGTACTATTTAAATATTTATACAAAAGGGTTTT
TGTTTATAGCTTAAGGAATGATACTGTGCTCTGCTTGGTGCATGGAGAAAAAGGAAGACCCATACTCTCCACACC
CTAGAGCTTTTCTCTAAATATTGTGCAAAGTTTTTGCTAGTTTTATCTTCTGACTTTGGGACTAGTTTTTGCTGC
AGAGTTGTGTGCTTTGTGATTTTCTCTGGGATAGTGTACTGTACACAACCAGATGTGTTCCACACTCCGTGAC
TCCGCAGTTTGTCTGGAGTGACATACACATCCACCATGGAAAGGGAAGCATCTCTGCCTGTGGATTCTCAAGTA
CTTGGAAAGCACCTCTCCTGAGGAACCTACAGGATTCTAAGGTTTCTAGGTCAGTGAACAACATAATCTTGGTCCC
TGAATATTTCTAGGTTTGTAAAGTGCAGCAGTTTTATTTCCTCTAGAACTCATCTGTTTCAAGGGAAGTACCTAA
GAAGATATAGAGTGTCTTCTAGGGTAAGGGACCTGCAGGTGTAAGCATAGATGAAATAACTGTCTGTACACGTG
CAGCAGGCCATGGAGTGTAGCGGGCATCGCTGCCGCCATTCTGCAGCATCACCATAAGCAGTGCAGGGTGTCTC
CATCGAGCTGTTTGGTTCCATGTGTGTTTAAACATGTGCAGAAGTAGCTTCTCTGTTTAAAGTTTAAAGTTGAG
TTTACCAGTC

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FIGURE 2534

ATGGCCCTGTCCACTGAGCATCCTCCCGCCACACAGAAACCCGCCAGCCGGGGCCACCGACCCACCCCCTGCC
TGGAAACTTAAGGAGGCCGGAGCTGTGGGGAGCTCAGAGCTGAGATCCTACAGGAGTCCAGGGCTGGAGAGAAAA
CCTCTGCGAGGAAAGGGAAGGAGCAAGCCGTGAATTTAAGGGACGCTGTGAAGCAATCATGGATGCAATGAAGAG
AGGGCTCTGCTGTGTGCTGCTGCTGTGTGGAGCAGTCTTCGTTTCGCCAGCCAGGAAATCCATGCCCGATTTCAG
AAGAGGAGCCAGATCTTACCAAGTGATCTGCAGAGATGAAAAACGCAGATGATATACCAGCAACATCAGTCATG
GCTGCGCCCTGTGCTCAGAAGCAACCGGGTGGAATATTGCTGGTGCAACAGTGGCAGGGCACAGTGCCACTCAGT
GCCTGTCAAAAGTTGCAGCGAGCCAAGGTGTTTCAACGGGGGCACCTGCCAGCAGGCCCTGTACTTCTCAGATTT
CGTGTGCCAGTGCCCCGAAGGATTTGCTGGGAAGTGCTGTGAAATAGATACCAGGGCCACGTGCTACGAGGACCA
GGGCATCAGCTACAGGGGCACGTGGAGCACAGCGGAGAGTGGCGCCGAGTGCACCAACTGGAACAGCAGCGCGTT
GGCCAGAAGCCCTACAGCGGGCGGAGGCCAGACGCCATCAGGCTGGGCCCTGGGGAACCACAACTACTGCAGAAA
CCCAGATCGAGACTCAAAGCCCTGGTGCTACGTCTTTAAGCGGGGAAGTACAGCTCAGAGTTCTGCAGCACCCC
TGCCTGCTCTGAGGGAAACAGTGACTGCTACTTTGGGAATGGGTGAGCTACCGTGGCACGCACAGCCTCACCGA
GTCGGGTGCCTCCTGCCTCCCGTGGAATTCATGATCCTGATAGGCAAGGTTTACACAGCACAGAAACCCAGTG
CCAGGCACTGGGCCCTGGGCAACATAATTACTGCCGGAATCCTGATGGGGATGCCAAGCCCTGGTGCCACGTGCT
GAAGAACCGCAGGCTGACGTGGGAGTACTGTGATGTGCCCTCCTGCTCCACCTGCGGCCCTGAGACAGTACAGCCA
GCCTCAGTTTCGCATCAAAGGAGGGCTCTTCGCCGACATCGCCTCCACCCCTGGCAGGCTGCCATCTTTGCCAA
GCACAGGAGGTGCGCCGGAGAGCGGTTTCTGTGCGGGGGCATACTCATCAGCTCCTGCTGGATTCTCTCTGCCGC
CCACTGCTTCCAGGAGAGGTTTCCGCCCCACCACCTGACGGTGATCTTGGGCAGAACATACCGGGTGGTCCCTGG
CGAGGAGGAGCAGAAATTTGAAGTCGAAAAATACATTGTCCATAAGGAATTCGATGATGACACTTACGACAATGA
CATTGCGCTGCTGCAGCTGAAATCGGATTGCTCCCGCTGTGCCAGGAGAGCAGCGTGGTCCGCACTGTGTGCCT
TCCCCGGCGGACCTGCAGCTGCCGGACTGGACGGAGTGTGAGCTCTCCGGCTACGGCAAGCATGAGGCCTTGTC
TCCTTTCTATTTCGGAGCGGCTGAAGGAGGCTCATGTCAGACTGTACCCATCCAGCCGCTGCACATCACAACATTT
ACTTAACAGAACAGTCACCGACAACATGCTGTGTGCTGGAGACACTCGGAGCGGCGGGCCCCAGGCAAACTTGCA
CGACGCCTGCCAGGGCGATTTCGGGAGGCCCCCTGGTGTGTCTGAACGATGGCCGCATGACTTTGGTGGGCATCAT
CAGCTGGGGCCTGGGCTGTGGACAGAAGGATGTCCCGGTGTGTACACCAAGGTTACCAACTACCTAGACTGGAT
TCGTGACAACATGCGACCGTGACCAGGAACACCCGACTCCTCAAAAGCAAATGAGATCCCGCCTCTTCTTCTTCA
GAAGACACTGCAAAGGCGCAGTGCTTCTCTACAGACTTCTCCAGACCCACCACCCGAGAAGCGGGACGAGACC
CTACAGGAGAGGGAAGAGTGCAATTTCCAGATACTTCCATTTTGGAAGTTTTCAGGACTTGGTCTGATTTTCA
GATACTCTGTGATGAGTGGGAAGACATGAATGCACACTAGCCTCTCCAGGAATGCCTCCTCCCTGGGCAGAAAGTGG
CCATGCCACCCTGTTTTAGCTAAAGCCCAACCTCCTGACCTGTACCGTGAGCAGCTTTGGAAACAGGACCACA
AAAATGAAAGCATGTCTCAATAGTAAAAGATAACAAGATCTTTCAGGAAAAGACGGATTGCATTAGAAATAGACAG
TATATTTATAGTCACAAGAGCCCAGCAGGGCCTCAAAGTTGGGGCAGGCTGGCTGGCCCCGTGATGTTCTCTCAAAA
GCACCCTTGACGTCAAGTCTCCTTCCCTTTCCCACTCCCTGGCTCTCAGAAGGTATTCTTTTGTGTACAGTG
TGTAAGTGTAATCCTTTTTCTTTATAAACTTTAGAGTAGCATGAGAGAATTGTATCATTTGAACAACCTAGGCT
TCAGCATATTTATAGCAATCCATGTTAGTTTTTACTTTCTGTTGCCACAACCCGTGTTTTATACTGTACTTAATAA
ATTCAGATATATTTTTACAGTTTTTCC

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FIGURE 2535

MDAMKRGLCCVLLLCGAVFVSPSQEIHARFRRGARSYQVICRDEKTQMIYQQHQSWLRPVLRNVRVEYWCNSGR
AQCHSVPVKSCSEPRCFNGGTCQQALYFSDFCQCEGFAGKCCEIDTRATCYEDQGISYRGTWSTAESGAECTN
WNSSALAQKPYSGRRPDAILGLGNHNYCRNPDRDSKPWCYVFKAGKYSSEFCSTPACSEGNSDCYFGNGSAYRG
THSLTESGASCLPWNSMILIGKVYTAQNPSAQAALGLGKHNYCRNPDGDAKPWCHVLKNRRLTWEYCDVPSCSTCG
LRQYSQPQFRIKGGFLADIASHPWQAALFAKHRRSPGERFLCGGILISSCWILSAAHCFQERFPPHHLTVILGRT
YRVVPGEEEQKFVEKEYIVHKEFDDDTYDNDIALQLKSDSSRCAQESSVVRTVCLPPADLQLPDWTECELSGYG
KHEALSPFYSERLKEAHVRLYPSSRCTSQHLLNRTVTDNMLCAGDTRSGGPQANLHDACQGDSGGPLVCLNDGRM
TLVGIISWGLGCGQKDVPGVYTKVTNYLDWIRDNMRP

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FIGURE 2536

ATGGCCCTGTCCACTGAGCATCCTCCCGCCACACAGAAACCCGCCAGCCGGGGCCACCGACCCACCCCTGCC
TGGAACTTAAGGAGGCCGGAGCTGTGGGGAGCTCAGAGCTGAGATCCTACAGGAGTCCAGGGCTGGAGAGAAAA
CCTCTGCGAGGAAAGGGAAGGAGCAAGCCGTGAATTTAAGGGACGCTGTGAAGCAATCATGGATGCAATGAAGAG
AGGGCTCTGCTGTGTGCTGCTGCTGTGTGGAGCAGTCTTCGTTTCGCCCAGCCAGGAAATCCATGCCCGATTTCAG
AAGAGGAGCCAGATCTTACCAAGTGATCTGCAGAGATGAAAAACGCAGATGATATACCAGCAACATCAGTCATG
GCTGCGCCCTGTGCTCAGAAGCAACCGGGTGGAATATTGCTGGTGCAACAGTGGCAGGGGCACAGTGCCACTCAGT
GCCTGTCAAAAGTTGCAGCGAGCCAAGGTGTTTCAACGGGGGCACCTGCCAGCAGGGCCCTGTACTTCTCAGATTT
CGTGTGCCAGTGCCCCGAAGGATTTGCTGGGAAGTGCTGTGAAATAGATACCAGGGCCACGTGCTACGAGGACCA
GGGCATCAGCTACAGGGGCACGTGGAGCACAGCGGAGAGTGGCGCCGAGTGCACCAACTGGAACAGCAGCGCGTT
GGCCAGAAAGCCCTACAGCGGGCGGAGGCCAGACGCCATCAGGCTGGGCCTGGGGAACCACAACTACTGCAGAAA
CCCAGATCGAGACTCAAAGCCCTGGTGCTACGTCTTTAAGCGGGGAAGTACAGCTCAGAGTTCTGCAGCACCCC
TGCCCTGCTCTGAGGGAAACAGTGACTGCTACTTTGGGAATGGGTGAGCCTACCGTGGCACGCACAGCCTCACCGA
GTCGGGTGCCTCCTGCCTCCCGTGGAATTCATGATCCTGATAGGCAAGGTTTACACAGCACAGAACCCAGTG
CCAGGCACTGGGCCTGGGCAAACATAATTACTGCCGACTGGACGGAGTGTGAGCTCTCCGGCTACGGCAAGCAT
GAGGCCTTGCTCTCCTTTCTATTTCGGAGCGGCTGAAGGAGGCTCATGTGAGACTGTACCCATCCAGCCGCTGCACA
TCACAACATTTACTTAACAGAACAGTCACCGACAACATGCTGTGTGCTGGAGACACTCGGAGCGGGGGCCCCAG
GCAAACTTGACAGACGCCTGCCAGGGCGATTTCGGGAGGCCCCCTGGTGTGTCTGAACGATGGCCGCATGACTTTG
GTGGGCATCATCAGCTGGGGCCTGGGCTGTGGACAGAAGGATGTCCCGGTGTGTACACCAAGGTTACCAACTAC
CTAGACTGGATTTCGTGACAACATGCGACCGTGACCAGGAACACCCGACTCCTCAAAAGCAAATGAGATCCCGCCT
CTTCTTCTTCAGAAGACACTGCAAAGGCGCAGTGCTTCTCTACAGACTTCTCCAGACCCACCACACCGCAGAAGC
GGGACGAGACCCTACAGGAGAGGGAAGAGTGCATTTTCCAGATACTTCCATTTTGGAAGTTTTCAGGACTTGG
TCTGATTTTCAGGATACTCTGTGATGGAAGACATGAATGCACACTAGCCTCTCCAGGAATGCCTCCTCCCTGG
GCAGAAAGTGGCCATGCCACCCTGTTTTTCAGCTAAAGCCCAACCTCCTGACCTGTCACCGTGAGCAGCTTTGGAA
ACAGGACCACAAAAATGAAAGCATGTCTCAATAGTAAAAGATAACAAGATCTTTCAGGAAAGACGGATTGCATTA
GAAATAGACAGTATATTTATAGTCACAAGAGCCCAGCAGGGCCTCAAAGTTGGGGCAGGCTGGCTGGCCCCGCAT
GTTCTCATAAGCACCCTTGACGTCAAGTCTCCTTCCCTTTCCCACTCCCTGGCTCTCAGAAGGTATTCTTTT
TGTGTACAGTGTGTAAAGTGAAATCCTTTTTCTTTATAAACTTTAGAGTAGCATGAGAGAATTGTATCATTTGA
ACAACCTAGGCTTCAGCATATTTATAGCAATCCATGTTAGTTTTTACTTTCTGTTGCCACAACCCCTGTTTTTACT
GTACTTAATAAAATTCAGATATATTTTTTACAGTTTTTCCAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2537

MDAMKRGLCCVLLLCGAVFVSPSQEIHARFRRGARSYQVICRDEKTQMIYQQHQS WLRPVLR SNRVEYCWCNSGR
AQCHSVPVKSCSEPRCFNGGTCQQALYFSD FVCQCEGFAGKCCEIDTRATCYEDQGISYRG TWSTAESGAECTN
WNSSALA QKPYSGRRPDAIRLGLGNHNYCRNPDRDSKPWCYVFKAGKYSSEFCSTPACSEGNSDCYFGNGSAYRG
THSLTESGASCLPWNSMILIGKVYTAQNPSA QALGLGKHNYCRTGRSVSSPATASMRPCLLSIRSG

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FIGURE 2538

ATGGCCCTGTCCACTGAGCATCCTCCCGCCACACAGAAACCCGCCAGCCGGGGCCACCGACCCCAACCCCTGCC
TGGAAACTTAAGGAGGCCGAGCTGTGGGGAGCTCAGAGCTGAGATCCTACAGGAGTCCAGGGCTGGAGAGAAAA
CCTCTGCGAGGAAAGGGAAGGAGCAAGCCGTGAATTTAAGGGACGCTGTGAAGCAATCATGGATGCAATGAAGAG
AGGGCTCTGCTGTGTGCTGCTGCTGTGTGGAGCAGTCTTCGTTTCGCCAGCCAGGAAATCCATGCCCGATTGAG
AAGAGGAGCCAGATCTTACCAAGGTTGCAGCGAGCCAAGGTGTTTCAACGGGGGCACCTGCCAGCAGGCCCTGTA
CTTCTCAGATTTTCGTGTGCCAGTGCCCCGAAGGATTTGCTGGGAAGTGCTGTGAAATAGATACCAGGGCCACGTG
CTACGAGGACCAGGGCATCAGCTACAGGGGCACGTGGAGCACAGCGGAGAGTGGCGCCGAGTGACCAACTGGAA
CAGCAGCGCGTTGGCCCAAGCCCTACAGCGGGCGGAGGCCAGACGCCATCAGGCTGGGCCTGGGGAAACCACAA
CTACTGCAGAAACCCAGATCGAGACTCAAAGCCCTGGTGCTACGTCTTTAAGCGGGGAAGTACAGCTCAGAGTT
CTGCAGCACCCCTGCCTGCTCTGAGGGAAACAGTGACTGCTACTTTGGGAATGGGTGACGCTACCGTGGCACGCA
CAGCCTCACCGAGTCGGGTGCCTCCTGCCTCCCGTGGAATTCATGATCCTGATAGGCAAGGTTTACACAGCACA
GAACCCAGTGCCAGGCACTGGGCCTGGGCAAACATAATTACTGCCGGAATCCTGATGGGGATGCCAAGCCCTG
GTGCCACGTGCTGAAGAACCGCAGGCTGACGTGGGAGTACTGTGATGTGCCCTCCTGCTCCACCTGCGGCCTGAG
ACAGTACAGCCAGCCTCAGTTTCGCATCAAAGGAGGGCTCTTCGCCGACATCGCCTCCCAACCCCTGGCAGGCTGC
CATCTTTGCCAAGCACAGGAGGTGCCCCGAGAGCGGTTCCGTGTGCGGGGGCATACTCATCAGCTCCTGCTGGAT
TCTCTTGCCGCCCCTGCTTCCAGGAGAGGTTTCCGCCCCACCCTGACGGTGATCTTGGGCAGAACATACCG
GGTGGTCCCTGGCGAGGAGGAGCAGAAATTTGAAGTCGAAAAATACATTGTCCATAAGGAATTCGATGATGACAC
TTACGACAATGACATTGCGCTGCTGCAGCTGAAATCGGATTCGTCCCGCTGTGCCAGGAGAGCAGCGTGGTCCG
CACTGTGTGCCTTCCCCCGCGGACCTGCAGCTGCCGGACTGGACGGAGTGTGAGCTCTCCGGCTACGGCAAGCA
TGAGGCCTTGCTCTCCTTTCTATTTCGGAGCGGCTGAAGGAGGCTCATGTCAGACTGTACCCATCCAGCCGCTGCAC
ATCACAACATTTACTTAACAGAACAGTCACCGACAACATGCTGTGTGCTGGAGACACTCGGAGCGGGGGCCCCA
GGCAAACCTGCACGACGCCTGCCAGGGCGATTCCGGGAGGGCCCCCTGGTGTGTCTGAACGATGGCCGCATGACTTT
GGTGGGCATCATCAGCTGGGGCCTGGGCTGTGGACAGAAGGATGTCCCGGTGTGTACACCAAGGTTACCAACTA
CCTAGACTGGATTCTGTGACAACATGCGACCGTGACCAGGAACACCCGACTCCTCAAAAGCAAATGAGATCCCGCC
TCTTCTTCTTCAGAAGACACTGCAAAGGCGCAGTGCTTCTCTACAGACTTCTCCAGACCCACCACACCGCAGAAG
CGGACGAGACCCCTACAGGAGAGGGAAGAGTGCAATTTCCAGATACTTCCCATTTTGGAAGTTTTAGGACTTG
GTCTGATTTAGGATACTCTGTGATGGGAAGACATGAATGCACACTAGCCTCTCCAGGAATGCCTCCTCCTG
GGCAGAAAGTGGCCATGCCACCCTGTTTTCAGCTAAAGCCCAACCTCCTGACCTGTACCGTGAGCAGCTTTGGA
AACAGGACCACAAAAATGAAAGCATGTCTCAATAGTAAAGATAACAAGATCTTTCAGGAAAGACGGATTGCATT
AGAAATAGACAGTATATTTATAGTCACAAGAGCCAGCAGGGCCCTCAAAGTTGGGGCAGGCTGGCTGGCCCGTCA
TGTTCTTCAAAGCACCCCTTGACGTCAAGTCTCCTTCCCTTTTCCCCACTCCCTGGCTCTCAGAAGGTATTCTTT
TTGTGTACAGTGTGTAAAGTGTAAATCCTTTTTCTTTATAAACTTTAGAGTAGCATGAGAGAATTGTATCATTG
AACAACTAGGCTTCAGCATATTTATAGCAATCCATGTTAGTTTTTACTTTCTGTTGCCACAACCCGTGTTTTATAC
TGTACTTAATAAATTCAGATATATTTTTCACAGTTTTTCCAAAAA

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FIGURE 2539

MDAMKRGLCCVLLLCGAVFVSPSQEIHARFRRGARSYQGCSEPRCFNGGTCQQALYFSDFVCQCPEGFAGKCCEI
DTRATCYEDQGISYRGTWSTAESGAECTNWNSSALAQKPYSGRRPDAILGLGNHNYCRNPD RD SKPWCYVFKAG
KYSSEFCSTPACSEGNSDCYFGNGSAYRGTHSLTESGASCLPWNSMILIGKVYTAQNPSAQAALGLGKHNYCRNPD
GDAKPWCHVLKNRRLTWEYCDVPSCSTCGLRQYSQPQFRIKGGFLADIASHPWQAAIFAKHRRSPGERFLCGGIL
ISSCWILSAAHCFQERFPPHLLTVILGRTRYRVVPGEQQKFEVEKYIVHKEFDDDTYDNDIALQLKSDSSRCAQ
ESSVVRTVCLPPADLQLPDWTECELSGYGKHEALSPFYSERLKEAHVRLYPSSRCTSQHLLNRTVTDNMLCAGDT
RSGGPQANLHDACQGDSSGGPLVCLNDGRMTLVGIISWGLGCGQKDVPGVYTKVTNYLDWIRDNM RP

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FIGURE 2540

GGAGGGGCGGGGCTCCGCCACCACCTCAGCTGCGGACCGAGGCGAGATGGCGGCCACCGAGGGGGTCGGGGAGG
CTGCGCAAGGGGGCGAGCCCGGGCAGCCGGCGCAACCCCGCCCCAGCCGCACCCACCGCCGCCCCAGCAGCAGC
ACAAGGAAGAGATGGCGGCCGAGGCTGGGGAAGCCGTGGCGTCCCCCATGGACGACGGGTTTGTGAGCCTGGACT
CGCCCTCCTATGTCCTGTACAGGGACAGAGCAGAATGGGCTGATATAGATCCGGTGCCGCAGAATGATGGCCCCA
ATCCCGTGGTCCAGATCATTTATAGTGACAAATGTAAGTTTTTTATGATTACTTCCGAGCTGTCCTGCAGCGTGA
TGAAAGAAGTGAACGAGCTTTTAAGCTAACCCGGGATGCTATTGAGTTAAATGCAGCCAATTATACAGTGTGGCA
TTTCCGGAGAGTTCTTTTGAAGTCACTTCAGAAGGATCTACATGAGGAAATGAACTACATCACTGCAATAATTGA
GGAGCAGCCCCAAAACATCAAGTTTGGCATCATAGGCGAGTATTAGTGGAATGGCTAAGAGATCCATCTCAGGA
GCTTGAATTTATTGCTGATATTCTTAATCAGGATGCAAAGAATTATCATGCCTGGCAGCATCGACAATGGGTTAT
TCAGGTATT

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FIGURE 2541

AACITTTTAAAACTCTCATTGGAGTAAGTCTTTTCAAGATGATCCTCCACAATGGAGGCAGCGTTCCTACTTGTC
ATCACACAGCTGAAGACATTGTTTTCTTAGGTGTGAAATCGGGGACAAAGGACAAACAGAGACACACGGCATTGTT
CATGGGAGGCATCGTCACCCCTCCTGGGTGTTCTGTGGGAATTTCTGTGTGAGGAAAACGTGGCCACAGGGTTGT
GCTGTACCCACCCCTTCCCCGGCGAGATGGCCCTCGGCCTGTGCCGCTGCTTCCACCCCTCGCCACTCCATGGCAGC
TTTTGGTCTGTTTCCGGCTCTGCCCTCTGCCCTGAACTCTCATCCGGCTTGTACCTGCCTGCTGGACCCCTCCAC
CTGGAGGCCAGCCCATGTCTCAGGCCAGCCCTAGCCTCTTCTCCTCAAATTCTAAGTGTTTTCTCTTTAGGTTT
CCCTGGCTTTGTGAATGGATCATGTGTCTCTAGGTATAAACCTGACATCATCTTTCCACCCGGCTTACCTCCACC
AGATCTCCCCAGTTCTGTCTCCATCTTCTGCCTGCAGCTGCTCTGTTCTCATGGTCACTGCTGCATCACTGAGTC
TGGACCCCTTGTTATCATTTTCAAACCTGGCCCTCCTTCCCTCGTTCCCCACTTCTTAAAGTCACCTGTCCATTGCCA
CCAGATTAAAGCTTTCTCCAGCCAGATCACCTCTCTCTGAGAAACCTCCATTGACATGGAAACACCATTGTCTGGC
ACACATACTCACATAACCCACCTTCCCGTCTTGATCCCCACACATCTTTCCAGCCTCCCCCTCCCACTCCACTCCCT
GCTCTCTCCTCCACCTCCCCATCCTCTTGCTCTCCCTCCCTCTGAATCCAGCCCAGCGGGGCTTCTCCTGCCTC
CATCACATCACAGAAGTACCTCCTGCTTCTGGTTTTAATTAGAGCCTTCCCCGATTACATTTTCTCTGAATTTT
TTCCTATCTACATTTGATCTGTCTGTTTAAACCCCTACTTCTAAGGGAACCTTCTCTAATCTCTTATCCTCATC
CCCAAATAGTGTTTTCTTCTCTGGGTCTTATAATGTTGGTATCAATCTCACAGCATTTAGTGCTTCTGCTG
GTGTGACAGTTACCTGTGTGCATGTGCAATTTCTAATTTCCACGCTAGACTGTGAGCTTCTAAGGCAAGAATC
ATGCCTCGTTGGTTTTCTGTATTCCTCATGGTGCCAAACACAGTGCCCTTCTACATTGCAGGCGCTGAATAAACATT
TTTAAAGCAAAAAAAAAAAAAAAAAA

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FIGURE 2542

MALGLCRCFHPRHSMAAFGLFPALPSALNSHPACTCLLDPSTWRPAHVSGPALASSPQILSVFSLGFFPGFVNGSC
VSRYPDIIFPPGLPPDLPSVSIFCLQLLCSHGHCITESGLLSFSNWPPSLVPHFLKSPVHCHQIKLSPAR
SPLSEKPPLTWKHHCLAHILTYPPSRDPHTSFQPPLPLHSLSPPPPHPLVSPPL

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[illegible]

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FIGURE 2543B

ACCCTGGATGAGCGACTTCAAAGTGGAGTTCCTGAGAAATGAGCTGGAGATTCCCGGTCAGTATGACGGTAGGGG
AAAGCCATTGCCAGAGTACCACGTGCGAATCGCCGGGTTTGATGAGCGGGTGACAGTCATGGCGTCTCTGCGAAG
GCCCCAAGCGCATCATCATCCGTGGCCATGACGAGAGGGAACACCCCTTTCCTGGTGAAGGGTGGCGAGGACCTGCG
GCAGGACCAGCGCGTGGAGCAGCTCTCCAGGTCATGAATGGGATCCTGGCCCCAAGACTCCGCCTGCAGCCAGAG
GGCCCTGCAGCTGAGGACCTATAGCGTTGTGCCCATGACCTCCAGGTTAGGATTAATTGAGTGGCTTGAAAATAC
TGTTACCTTGAAGGACCTTCTTTTGAACACCATGTCCCAAGAGGAGAAGGCGGCTTACCTGAGTGATCCCAGGGC
ACCGCCGTGTGAATATAAAGATTGGCTGACAAAAATGTCAGGAAAACATGATGTTGGAGCTTACATGCTAATGTA
TAAGGGCGCTAATCGTACTGAAACAGTCACGTCTTTTAGAAAACGAGAAAAGTAAAGTGCCTGCTGATCTCTTAAA
GCGGGCCTTCGTGAGGATGAGTACAAGCCCTGAGGCTTTCCTGGCGCTCCGCTCCCACTTCGCCAGCTCTCACGC
TCTGATATGCATCAGCCACTGGATCCTCGGGATTGGAGACAGACATCTGAACAACCTTTATGGTGGCCATGGAGAC
TGGCGGCGTGATCGGGATCGACTTTGGGCATGCGTTTGATCCGCTACACAGTTTCTGCCAGTCCCTGAGTTGAT
GCCTTTTCGGCTAACTCGCCAGTTTATCAATCTGATGTTACCAATGAAAGAAACGGGGCTTATGTACAGCATCAT
GGTACACGCACTCCGGGCCTTCGCTCAGACCCTGGCCTGCTCACCAACACCATGGATGTGTTGTCAAGGAGCC
CTCCTTTGATTGGAAAAATTTTGAACAGAAAATGCTGAAAAAAGGAGGGTCATGGATTCAAGAAATAAATGTTGC
TGAAAAAATTGGTACCCCCGACAGAAAATATGTTACGCTAAGAGAAAGTTAGCAGGTGCCAATCCAGCAGTCAT
TACTTGTGATGAGCTACTCTGGGTGATGAGAAGGCCCTGCCTTCAAAGACTATGTGGCTGTGGCACGAGGAAG
CAAAGATCACACATTTCGTGCCCCAAGAACCAGAGAGTGGGCTTTCAGAAGAGACTCAAGTGAAGTGCCTGATGGA
CCAGGCAACAGACCCCAACATCCTTGGCAGAACCTGGGAAGGATGGGAGCCCTGGATGTGA

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FIGURE 2544

GGAGTCCGCGAGCGTCGTCCGCAAGCGGCCGCTTTCCACGGTAACCGCGCGCCGGCGGGGAGGGCGTGCGCGG
AGCCGACGGGAACGTCCGCGCTGCGGAGCAGGGCAGGGAAGCCGGGAGGCGGGCCCCGGCCGAGCTTGTCCTTGT
CGCGCAGGTACTCCGAGCACTATGTCTCCCGGCGTCGACCCCGAGCCGCCGCGGCAGCCGGCGTGGAAGGGCC
ACCCCCGCCCAGACGCCTCGGAGTGAGGATGCCAGGTCTCTCCCTCTCAGAGACGTAGAGGCGAGGATTCCACC
TCCACGGGGGAGTTGCAGCCGATGCCAACCTCGCCTGGAGTGGACCTGCAGAGCCCTGCTGCGCAGGACGTGCTG
TTTTCCAGCCCTCCCCAAATGCATTCTTCAGCTATCCCTCTTGACTTTGATGTTAGTTCACTGACATACGGC
ACTCCCAGCTCTCGGGTAGAGGGAACCCCAAGAAGTGGTGTAGGGGCACACCTGTGAGACAGAGGCTGACCTG
GGCTCTGCACAGAAGGGCCTGCAAGTGGATCTGCAGTCTGACGGGCGAGCAGCAGAAGATATAGTGGCAAGTGAG
CAGTCTCTAGGCCAAAACTTGTGATCTGGGGAACAGATGTAAATGTGGCAGCATGCAAAAGAAAACTTTTCAGAGA
TTTCTTCAGCGTTTTATTGACCTCTGGCTAAAGAAGAAGAAAAATGTTGGCATAGATATTACTGAACCTCTATAC
ATGCAACGACTTGGGGAGATTAAATGTTATTGGTGAGCCATTTTAAATGTGAAGTGTGAACACATCAAAATCATTT
GACAAAAATTTGTACAGACAACCTCATCTCTTACCCACAGGAAGTTATTCCAACCTTTGACATGGCTGTCAATGAA
ATCTTCTTTGACCGTTACCCTGACTCAATCTTAGAACATCAGATTCAAGTAAGACCATTCAACGCATTGAAGACT
AAGAATATGAGAAACCTGAATCCAGAAGACATTGACCAGCTCATCACCATCAGCGGCATGGTGATCAGGACATCC
CAGCTGATTCCCGAGATGCAGGAGGCCCTTCTCCAGTGCCAAGTGTGTGCCACACGACCCGGGTGGAGATGGAC
CGCGGCCGCATTGCAGAGCCAGTGTGTGCGGGCGCTGCCACACCACCCACAGCATGGCACTCATCCACAACCGC
TCCCTCTTCTCTGACAAGCAGATGATCAAGCTTCAGGAGTCTCCGGAAGACATGCCTGCAGGGCAGACACCACAC
ACAGTTATCCTGTTTGTCTACAATGATCTCGTTGACAAGGTCCAGCCTGGGGACAGAGTGAATGTTACAGGCATC
TATCGAGCTGTGCCTATTTCGAGTCAATCCAAGAGTGAGTAATGTGAAGTCTGTCTACAAAACCCACATTGATGTC
ATTCATTATCGGAAAACGGATGCAAAACGCTGTCATGGCCTTGATGAAGAAGCAGAACAGAACTTTTTTCAGAG
AAACGTGTGGAATTGCTTAAGGAACCTTCCAGGAAACCAGACATTTATGAGAGGCTTGCTTCAGCCTTGCGTCCA
AGCATTATGAACATGAAGATATAAAGAAGGGAATTTTGCTTCAGCTCTTTGGCGGGACAAGGAAGGATTTTAGT
CACATGGAAGGGGCAAATTTCCGGGCTGAGATCAACATCTTGCTGTGTGGCGACCCCTGGTACCAGCAAGTCCCAG
CTGCTGCAGTACGTGTACAACCTCGTCCCCAGGGGCCAGTACACGCTTGGAAGGGCTCCAGTGCAGTTGGCCTC
ACTGCGTACGTAATGAAAGACCCCTGAGACAAGGCAGCTGGTCTGCAGACAGGTGCTCTTGCTCCTGAGTGACAAC
GGCATCTGCTGTATCGATGAGTTGACAAGATGAATGAAAGTACAAGATCGGTATTGCATGAAGTCATGGAACAG
CAGACTCTGTCCATTGCAAAGGCTGGGATCATCTGTGAGTCAATGCGCGCACCTCTGTCTGCTGGCAGCAAAAT
CCCATTGAGTCTCAGTGGAATCCTAAAAAAACAACCATTTGAAAACATCCAGCTGCCTCATACTTTTATTATCAAGG
TTTGATTTGATCTTCCCTCTTGCTGGACCCCTCAGGACGAAGCCTATGACAGGCGTCTGGCTCACCACCTGGTCGCA
CTGTACTACCAGAGCGAGGAGCAGGCAGAGGAGGAGCTCCTGGACATGGCGGTGCTAAAGGACTACATTGCCTAC
GCGCACAGCACCATCATGCCGCGGCTAAGTGAGGAAGCCAGCCAGGCTCTCATCGAGGCTTATGTAGACATGAGG
AAGATTGGCAGTAGCCGGGGAATGGTTTCTGCATACCCTCGACAGCTAGAGTCATTAATCCGCTTAGCAGAAGCC
CATGCTAAAGTAAGATTGTCTAACAAAGTTGAAGCCATTGATGTGGAAGAGGCCAAACGCCTCCATCGGGAAGCT
CTGAAGCAGTCTGCAACTGATCCCCGACTGGCATCGTGACATATCTATTCTTACTACGGGGATGAGTGCCACC
TCTCGTAAACGGAAGAAGATTAGCTGAAGCATTGAAAAGCTTATTTTATCTAAGGGCAAACACCAGCTCTA
AAATACCAGCAACTTTTTGAAGATATTCCGGGACAATCTGACATAGCAATTACTAAAGATATGTTTGAAGAAGCA
CTGCGTGCCCTGGCAGATGATGATTTCTGACAGTGAAGTGGGAAGACCGTGCCTTGCTCTGAAGCCTTGTGAGC
AAGGAAGGCTCCCTGCATGTCCTGCTTGCTGCACGCCACATGGGTGTGGTCTGCATCTCAGTTGGCCGCCATCAG
TGTAATAGAGCTTAAAGTCATGGTTTGGCTGCATAAAAAATTTCTAACTTGGGTTCAATATTGTAGTGAAGTA
TCTGTTTTTCAATTTTTTTCAGTTATAAATAAAAAATACTATGCTGGCCGGGCGCGGTGGCTCACACCTGTAATCCC
AGCACTTTGGGAGGCCAATGTGGGTGGATCATGAGGTGAGGAGTTCAAGACCAGCCTAGCCAAGATGGTGAAACC
CCGTCTCTAGTAAAGATAACAAAAAATTAGCTGGGCTTGATGGCATGCGCTGTAATCCCAGCTACTCGGGAGGT
TGAGGCAGGAGAATCGCTTAAACCCAGGCGGCAGAGGTTGCAGTGAGCCAAGATCGCGCCACTGCACTCCAGCCT
CAGCAATAGAGTGAGACTGTCTC

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FIGURE 2545

MSSPASTPSRRGSRGRATPAQTPRSEDARSSPSQRRRGEDSTSTGELQPMPTSPGVDLQSPAAQDVLFSSPPQM
HSSAIPLDFDVSSPLTYGTPSSRVEGTPRSGVRGTPVRQRPDLGSAQKGLQVDLQSDGAAAEDIVASEQSLGQKL
VIWGTDVNVAACKENFQRFIDPLAKEEENVGIDITEPLYMQRLGEINVIGEPFLNVNCEHIKSFDKNLYRQ
LISYPQEVIPTFDMAVNEIFFDRYPDSILEHQIQVRPFNALKTKNMRNLNPEDIDQLITISGMVIRTSQLIPEMQ
EAFFQCQVCAHTTRVEMDRGRIAPSVCGRCHTTHSMALIHNRSLFSDKQMIKLQESPEDMPAGQTPHTVILFAH
NDLVDKVQPGDRVNVGTGIYRAVP IRVNPRVSNVKSVMYKTHIDVIHYRKTDKRLHGLDEEAEQKLFSEKRVELLK
ELSRKPDIIYERLASALAPSIYEHEDIKKGILLQLFGGTRKDFSHTRGKFRAEINILLCGDPGTSKSQLLYVYN
LVPRGQYTSKGKSSAVGLTAYVMKDPETRLVLQTGALVLSDNIGCCIDEFDKMNESTRSVLHEVMEQQTLISIAK
AGIICQLNARTSVLAAANPIESQWNPCKTTIENIQLPHTLLSRFDLIFLLLDLPQDEAYDRRLAHLVALYYQSEE
QAEELLDMAVLKDYIAYAHSTIMPRLSEESQALIEAYVDMRKIGSSRGMVSAYPRQLESILRLAEAHAKVRLS
NKVEAIDVEEAKRLHREALKQSATDPRTGIVDISILTTGMSATSRKRKEELAEALKKLIILSKGKTPALKYQQLFE
DIRGQSDIAITKDMFEEALRALADDDFLTVTGKTVRLI

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FIGURE 2546

CGCGTCGGGCTGCAGGAGAAGATGGCGGTCTCCACAGGAGTTAAAGTTCTCGTAATTTTCGCTTGTTGGAAGAA
CTTGAAGAAGGACAAAAAGGAGTAGGCGACGGTACAGTTAGCTGGGGCCTTGAAGATGATGAAGATATGACACTT
ACAAGGTGGACAGGCATGATTATTGGGCCACCAAGGACAAATTATGAAAACAGAATATATAGCCTGAAAAGTAGAA
TGTGGACCTAAATACCCAGAAGCTCCTCCGTCAAGTTAGATTGTAAACAAAAATTAATATGAACGGAATAAATAAT
TCCAGTGGGATGGTGGATGCCCGGAGCATACCAGTGTTAGCAAAATGGCAAAATTCATATAGCATTAAAGTTGTA
CTTCAAGAGCTAAGACGTCTAATGATGTCCAAAGAAAATATGAAGCTTCCACAGCCACCAGAAGGACAAACATAC
AACAATTAATTTTAGTGGATCTCAAACCTGTCTTAAATCAACAACCTTCTACTCATGTTAATGTCTTGATTAAAT
ATCACAATGCAAAATACACATTAAAGTAAAAGAATCCAGCTGGTAAACATGACCTGGACATTTGTAAGAATATAT
TTAATATATGTACACCCATTATGTTTTTCAGGTAACAGGAGGAAAAATGCAGCACAATTTTTTTCTCTTGAAAGG
CACTGTCAATTTAAACATAAACCTGGAGTACTCGAAATAGAATTCAGGTTTACAAGATGAAAGCGTGTGGAGAAGT
GTCAGATGGCAGTGGAAAGCATGTGTGTTTCTAAAAAGTAAAAATCTCAAGAAAAACAGAAATGGCATGCTTTACCC
ATCTTACTTAGTGAAAGAGAGCTGCAGTTGAAATTGTTTAAAAAGTAGCAGGTACAATGAATATTGTCACAGATG
TGTTAATTTTTGAAGCAATGTGGGTGCTGACTACTAGTAGTATCAAAAATATGTTTCAGGATTGTTTTGATACCTG
TATTTATAATAAAAAATGTTGGGGGGAGTTGATGAATTCCTGTTAAAAAGCTGTTCTTGTGTGTTACATGTAACAG
ACATGGTAAATATTTGTTTACAGTCTTTGTTTAAACAAACCATGCATTTAAGTTTAAAGTGAAGTCAACAAAAAGGA
AATAGGTGTATGGATATGTGATTTTGAGATTAAAGTTAGTCTTAAATGTAAATAAAATGTGAAACGTGTCCTCA
GAGACTGTGCCATTTCTATTATGTTGATGTATATGTACAGTACCTTGCCAGGGAAGCAAAAATTGGAATTATTGT
AGCTTTTCATGTATACACACTTTTATTACCCTATTTTGTTACTTCTTGTGAATTATAATTTGCAGACTATTTT
AGAAAAGAAATTATCTAGTTTAATTTCTTTTGGACAAGGAGTCCTAGGTATTATATTTTGAGTTTGATTTTAC
CAGAAATAATAATATTAATAAGATCTTTGCATTCTGGCAGTTCTTTTAGGATTATAGGTTGCAAAATTATCCAAAT
ATATATCCCATTTTTTAAAGCATAAAAA

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FIGURE 2547

MAVSTGVKVPRNFRLLLEELEGQKGVGDGTVSWGLEDDEDMTLTRWTGMIIGPPRTNYENRIYSLKVECGPKYPE
APP SVRFVTKINMNGINNSSGMVDARSIPVLAKWQNSYSIKVVLQELRRLMMSKENMKLPQPPEGQTYNN

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FIGURE 2548

AGATGGGCCATCAACTGAGAAAGACCTTGACGAAAAGAAGAAAGAACCTGCAATTACATCGCAGAACAGCCCTGA
GGCAAGAGAAGAAAGTACTTCCAGCGGCAATGTAAGCAACAGAAAGGATGAGACAAATGCTCGAGATACTTATGT
TTCATCCTTTCTCGGGCACCAAGCACCTTCTGATTCTGTGCGGTTGAAGTGTAGGGAGATGCTTGGCTGCAGCTCT
TCGAACAGGGGATGACTACATTGCAATTGGAGCTGATGAGGAAGAATTAGGATCTCAAATTGAAGAAGATATATA
TCAAGAAATAAGGAATACAGACATGAAATACAAAAATAGAGTACGAAGTAGGATATCAAATCTTAAAGATGCAAA
AAATCCAAATTTAAGGAAAAATGTCTCTGTGGGAATATTCTCTGACTTATTTGCTAGAATGACAGCAGAGGA
AATGGCTAGTGATGAGCTGAAAGAGATGCGGAAAACTTGACCAAAGAAGCCATCAGAGAGCATCAGATGGCCAA
GACTGGTGGGACCCAGACTGACTTGTTCCACATGTGGCAAATGTAAAAAGAAGAATTGCACCTTACACACAGGTACA
AACCCGTAGTGCTGATGAACCAATGACAACATTTGTTGTCTGTAATGAATGTGGAAATCGATGGAAGTTCTGTTG
AGTTGGAAGAATTGGCAAAATATCTGGACCATTAAAGAAACGGATTTTGTAAGTAGCTTTAAACTAGGCCAAGCA
ACTAGTTTTCTGCAAAATCAAATTTTTAAAGCAACTTGGGTTAGACTTTGTTTTTGACCTAACATCCCTTCCTTA
AATGCCTTCTGTAGTTTTCAGATCAGTAGGGAGACCATATAATAATTTTATGGTACCTGTTTCAAAACATATTTTT
TCTGTTTTTATAAGTAAGTTGATATTAATTAACCTCTTGGAATATTTCTTCTTTCTTAAAGGAAAAATATACCTT
AATTTTTTTCTTTTACACTGTGAAACATACACAGTAGAAATCTGTTACTCTCTGTTATTAATACATAAAATGAA
AATACATTTTTTTCCATATTGGCATGTAGCTACAAATATTAAAGGAGGAGAAAAAGGTAATATAATTTTAGGTTTA
CCAAATATGGTGTGTATTCAAATAACTTGACCAGCTTATCTAAATGTACATAATTTTGAGGTAGCTTATGAA
TTTGATTTTAATTATTATGTTCAAGCTTGGAATATTAGATATTATTTTGCATCTGTAACCTAACCGTGATCATC
ATTTCTTGTAATTTCTTGATCATGTATATTACTTGTCTTAATAGATTTTTTGGAACAAGACTTTATTGAGATCA
GTTTGGTTTTCTGTTAATTTACCTGTTTGACTTTATAATGTGTTTTAGTTTTGCAGAAGAAGACTGTTGTAGTT
TAGAAGGCTTTTCATAAATCCCTCATAGGCAAGATGAAAACCTCCCACTATTTTTTTCCCTCTTAGGAAGAC
ATACTGGAAGAAAAATGTTAGCATCTTAGTGATAGTATTGTAAACAGTTCATGACTAGATTTTGATTCTG
GAAATCTATACTGACCAAGGATTAATCTTAAGGATTGTATAATTCATTAAAGCTGTGGTCTTTCCATGTGGAGAC
TGATAGAAAAATAATTTGTCCCAAGTCTTATTTGCTGACTTTTTCTGTCATGAGTGAGATTGTTGAACAACTGA
ATATATGGGCTATAGCAAGTAGCTTTACAGTACAGATCTTACAATTAAGTTTTGCTTTTGTTAAAGTGTGTACCA
TTTTTTCTGTTTGAGTAAGACAAAAATGTTTTGACATAGGTTCCCTAGGGTACACTTGCTCTAGCATACTTTA
AAGGCCACTGTTGCAAAGTCTACATTTTATGCTGAATCTGCATTCTGTCAGGCACCCGTAGAAAGACCTCAGTAC
ATGCTTTGCACTCTCCTTTGCTCCCTTTTTCCAATTTCTTATTGCATATCATTTTGTTGTAATACAGAAAGCAGC
ATTTTTAAATGTCCGTGTTAAGAATTGGCCCACTGGTACCAACTCACCTCTATTTTGTGAGTTTATAGTTGAAGA
TTTTGTTTTATTTCAAAAACAAAGTACATTTTGAATAATGTTTCAGAATAAAATAATCTCACTTTTAAGTGAT
CCATTTTAAATTTGTAATTCAATAAAGTTTTTTTTGTTGTTAAACAT

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FIGURE 2549

MLAAALRTGDDYIAIGADEEELGSQIEEDIYQEIRNTDMKYKNRVRSRISNLKDAKNPNLRKNVLCGNIPDLFA
RMTAEEMASDELKEMRKNLTKEAIREHQMAKTGGTQTDLFTCGKCKKKNCTYTQVQTRSADEPMTTFVVCNECGN
RWKFC

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FIGURE 2550

CGGCGGGCGAGGGGCGAGGGCGGGCGGACCTGGACGCGCGGGCGCGCGGGAAGGTAGCGCGGGGCCGCGTTGG
CGCGCACGCGCCTGAGCGTGCGCCCGGTGGGGCCGGCCGGGACTCGCCGCTCGCACGCCCTTGGGCCGCGGGCCGG
GCGCCCGCTCTTCCCTTCCGCTTGCCTGTGAGCTGAGGCGGTGATGTCGGCAATAACATGTCAACCCCGCTGC
CCGCCATCGTGCCCGCCGCCCGGAAGGCCACCGCTGCGGTGATTTTCTGTCATGGATTGGGAGATACTGGGCACG
GATGGGCAGAAGCCTTTGCAGGTATCAGAAGTTCACATATCAAATATATCTGCCCAGCATGCGCCTGTTAGGCCTG
TTACATTAAATATGAACGTGGCTATGCCCTCATGGTTTGATATTATTGGGCTTTCACCAGATTACAGGAGGATG
AATCTGGGATTAAACAGGCAGCAGAAAATATAAAAGCTTTGATTGATCAAGAAGTGAAGAATGGCATTTCCTTCTA
ACAGAATTATTTTGGGAGGGTTTTCTCAGGGAGGAGCTTTATCTTTATATACTGCCCTTACCACACAGCAGAAAC
TGGCAGGTGTCACGCACTCAGTTGCTGGCTTCCACTTCGGGCTTCCTTTCACAGGGTCCCTATCGGTGGTGCTA
ATAGAGATATTTCTATTCTCCAGTGCCACGGGGATTGTACCCCTTTGGTTCCCTGATGTTTGGTTCTCTTACGG
TGGAACAACTAAAAACATTGGTGAATCCAGCCAATGTACCTTTAAACCTATGAAGGTATGATGCACAGTTTCGT
GTCAACAGGAAATGATGGATGTCAAGCAATTCATTGATAAACTCCTACCTCCAATTGATTGACGTCACCTAAGAGG
CCTTGTGTAGAAGTACACCAGCATCATTGTAGTAGAGTGTAACCTTTTCCCATGCCCAGTCTTCAAATTTCTAA
TGTTTTGCAGTGTTAAATGTTTTGCAAATACATGCCAATAACACAGATCAAATAATATCTCTCATGAGAAATT
TATGATCTTTTAAAGTTTCTATACATGTATTCTTATAAGACGACCCAGGATCTACTATATTAGAATAGATGAAGCA
GGTAGCTTCTTTTTTCTCAAATGTAATTCAGCAAAATAATACAGTACTGCCACCAGATTTTTTATTACATCATTT
GAAAATTAGCAGTATGCTTAATGAAAATTTGTTTCAGGTATAAATGAGCAGTTAAGATATAAACAATTTATGCATG
CTGTGACTTAGTCTATGGATTTATTCCAAAATTGCTTAGTCACCATGCAGTGTCTGTATTTTTATATATGTGTTT
ATATATACATAATGATTATAATACATAATAAGAATGAGGTGGTATTACATTATTCCTAATAATAGGGATAATGCT
GTTTTATTGTCAAGAAAAAGTAAATCGTTCTCTCAATTAATGGCCCTTTTATTTTGGGACCAGGCTTTTATTTT
CCCTGATATTATTTCTATTTAATACTCTTTCTCTCAAGAAAAAAAAAAGTTTGTTTTTTCTTTATTGTCCTT
CATAGCAGGCCAAGTATTGCCTCTCTGCAATAGACAGCTACTGTCAATACATGCTGTAATTTGACATTCTGGGTC
ACAGATATAAGGTATTTAAATCTATTTATGCTTTATAGAGAAACCAGACATTAACCTTCATGCACTACTTATT
TCGAATTACTGTACCTTATCCAAATTTACACCTAGCTATTAGGATCTTCAACCCAGGTAACAGGAATAATTCTGT
GGTTTCATTTTTCTGTAAACAACGAAAGAATAATTAGATCATATTCTAGTATGTTCTGAAATATCTTTAAGACT
GATCTTAAAACTAACTTCTAAGATGATTTTCATCTTCTCATAGTATAGAGTTTACTTTGTACACGTTTGAAACCA
ACTACTGTAGAAGATGAGGAATCTATTGTAATTTTTTGTCTTTATTTTCATCTGCCAGTGGACTTATTTGAAATTT
TCACTTTAGTCAAATTATTTTTTGTATTAGTTTTTGATGCAGACATAAAAAATAGCAATCATTTTAAATTGTCAA
ATTTCCAGATTACTGGTAAAAATTATTTGAAAACAACTTATGGGTAATAAAGGCTAGTCAGAACCCATATACCAT
AAAGTGTAGTTACCATACAGATTAATATGTAGCAAAAATGTATGCTTGATTTTCTCAACTGTGTTAATTTTTCT
GCTGTATTCCAGCTGACCAAAACAATATTAAGAATGCATCTTTATAAATGGGTGCTAATTGATAATGGAAATAAT
TTAGTAATGGACTATACAGGATGTTAATAATGAAGCCATATGTTTATGTCTGGATTTAAAAATTTTAAACAATCA
TTTACTATGTCATTTTTCTTTACCTTGAAGAACATAAACTGTTATTTCACTTCTACAAATCAGCAAGATATTATT
TATGGCAAGAAATATTCATTGAAATATTGTGCTGTAACATGGGAAAGTGTAATGTTTTTCATGGTTTCTATCA
ATGTGAAATAAAAATTTAATTCTGAAAA

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FIGURE 2551

MCGNNMSTPLPAIVPAARKATAAVIFLHGLGDTGHGWAEAFAGIRSSHIKYICPHAPVRPVTLMNVAMP SWFDI
IGLSPDSQEDESIGKQAAENIKALIDQEVKNGIPSNRI ILGGFSQGGALS LYTALT TQQKLAGVTALSCWLPLRA
SFPQGP IGGANRDISILQCHGDCDPLVPLMFGSLTVEKCLKTLVNPANVTFKTYEGMMHSSCQEMMDVKQFIDKL
LPPID

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FIGURE 2552

CTTTCTTTTTGAGGAAGACGCGGTTCGTAAGGGCTGAGGATTTTTGGTCCGCACGCTCCTGCTCCTGACTCACCGC
TGTTTCGCTCTCGCCGAGGAACAAGTCGGTCAGGAAGCCCGCGCGCAACAGCCATGGCTTTTAAGGATACCGGAAA
AACACCCGTGGAGCCGGAGGTGGCAATTCACCGAATTCGAATCACCCTAACAAGCCGCAACGTAAAAATCCTTGGA
AAAGGTGTGTGCTGACTTGATAAGAGGCGCAAAAGAAAAGAATCTCAAAGTGAAAGGACCAGTTCGAATGCCTAC
CAAGACTTTGAGAATCACTACAAGAAAACTCCTTGTGGTGAAGGTTCTAAGACGTGGGATCGTTTCCAGATGAG
AATTCACAAGCGACTCATTGACTTGACACAGTCCTTCTGAGATTGTTAAGCAGATTACTTCCATCAGTATTGAGCC
AGGAGTTGAGGTGGAAGTCACCATTGCAGATGCTTAACTCAACTATTTTAATAAAATTGATGACCAGTTGTTAAAA
AAAAAAAAAAAAAA

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FIGURE 2553

MAFKDTGKTPVEPEVAIHRIRITLTSRNVKSLEKVCADLIRGAKEKNLKVKGpVRMPTKTLRITTRKTPCGEGSK
TWDRFQMRIHKRLIDLHSPSEIVKQITSISIEPGVEVEVTIADA

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FIGURE 2554

ATGATGAAGGGAACGTCATCATTGGAAAGCATTGCAATAAGACGTACACGTTATGCCACCACTGTGGCTCTAAG
GCCTACCACCTTCAGAAGTCGACCTATGGCAAATGTGGCTACACTGCCAAGCGCAAGAGAAAGTATAACTGGAGT
ACCAAGGCTAAAAGACGAAATACCACCAGAACTGGTCAAATGAGGCACCTAAAAATTGTATACCATAGATTCAGG
CATGGATTCCGTGAAGGAACAACACCTAAACCCAAGAGGGCAGCTGTTGCAGCATCCAGTTCATCTTAA

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FIGURE 2555

MMKGTSSFGKHCNKTYTLCHHCGSKAYHLQKSTYGKCGYTAKRKRKYNWSTKAKRRNTTRTGQMRHLKIVYHREFR
HGFREGTTPKPKRAAVAASSSS

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FIGURE 2556

CCCTGGTGTGATTCCATCCTGTGTGGCTGTTCTCTGGAGCAGCATTTCGTTTATCTTCGTCCGCCCTTCTCTCCTAC
CTAAGTGCGTGCTGCCTCCCGATGGAAGATCTGATGGACGTGGACATGAGCTCCCTGAGGCCCCAGAACTATCTT
TTTGGTTGTGAACTAAAGGCTGACAAAGATTGTCACTTTAAGGTGGATAATGATGAAAATGAGCGCCAGTTGTCT
TTAAGAACGGTCAGTTTAGGGGCTGGTGCAAAGGATGAATTGCACATTGTTGAAGCAGAGGCAATGAATTACGAA
GGCAGCCCAATTAAAGTAACACTGGCAACTTTGAAAATGTCTGTACAGCCAACGGTTTCCCTTGGGGGCTTTGAA
ACAACACCACCAGTAGTCTTAAGGTTGAAGTGTGGTTCAGGGCCAGTGCATATTAGTGGACAGCACTTAGTAGCT
GTGGAGGAAGATGCAGAGTCAGAAGATGAAGAGGAGGAGGATGATGATGAAGATGATGATGATGATTTTAAATGAT
GAGGAAGCTGAAGAAAAAGTGCCAGTGAAGCAATCTATACAAGATACTCCAGCCAAAAATGCACAAAAGTCAAAT
CAGAAATGGAAAAGACTCAAAACCATCAACACCAAGATCAAAAGGACAAGAATCTTTCAAAAAACAGGAAAAAAAC
TCCTAAACACCAAAAGGACCTAGTTCTGTAAAAGACAT

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FIGURE 2557

GATTCCATCCTGTGTGGCTGTTCTCTGGAGCAGCATTTCGTTTATCTTCGTCCGCCCTTCTCTCCTACCTAAGTGCG
TGCTGCCTCCCGATGGAAGATCTGATGGACGTGGACATGAGCTCCCTGAGGCCCCAGAACTATCTTTTTGGTTGT
GAACTAAAGGCTGACAAAGATTGTCACTTTAAGGTGGATAATGATGAAAAATGAGCGCCAGTTGTCTTTAAGAACG
GTCAGTTTAGGGGCTGGTGCAAAGGATGAATTGCACATTGTTGAAGCAGAGGCAATGAATTACGAAGGCAGCCCA
ATTAAAGTAACACTGGCAACTTTGAAAAATGCTGTACAGCCAACGGTTTTCCCTTGGGGGCTTTGAAACAACACCA
CCAGTAGTCTTAAGGTTGAAGTGTGGTTCAGGGCCAGTGCATATTAGTGGACAGCACTTAGTAGCTGTGGAGGAA
GATGCAGAGTCAGAAGATGAAGAGGAGGAGGATGTGAAACTCTTAAGTATATCTGGAAAGCGATCTGCCCTCGGA
GGTAGTAGCAAGCTTCCACAGAAAAAGTAAAACTTGCTGCTGATGAAGATGATGATGATGAAGAAGATGAT
GATGATGAAGATGATGATGATGATTTTAATGATGAGGAAGCTGAAGAAAAAGTGCCAGTGAAGCAATCTATACAA
GATACTCCAGCCAAAAATGCACAAAAGTCAAAATCAGAATGGAAAAGACTCAAAACCATCAACACCAAGATCAAAA
GGACAAGAATCTTTCAAAAAACAGGAAAAAACTCCTAAAAACACCAAAAGGACCTAGTTCTGTAAAAGACATTAA
AGCAAAAATGCAAGCAAGTATAGAAAAAGGTGGTCTCTTCCCAAAGTGGAAGCCAAGTTCATCAATTACGTGAA
GAATTGCTTCCGGATGACTGACCAAGAGGCTATTCAAGATCTCTGGCAGTGGAGGAAGTCTCTTTAAGAAAATAG
TTTAAACAATTTGTTAAAAATTTTCCGTCTTATTTTCAATTTCTGTAAACAGTTGATATCTGGCTGTCCTTTTTATAA
TGCAGAGTGAGAACTTTCCCTACCGTGTTTGATAAATGTTGTCCAGGTTCTATTGCCAAGAATGTGTTGTCCAAA
ATGCCTGTTTAGTTTTTAAAGATGGAACCTCCACCCTTTGCTTGGTTTTAAGTATGTATGGAATGTTATGATAGGA
CACAGTAGTAGCGGTGGTCAGACATGGAAATCGTGGGGAGACAAAAATATACCTGTGAAATAAACTCAGTATTT
TAAT

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FIGURE 2558

GGAGCAGCATTTCGTTTATCTTCGTCCGCCTTCTCTCCTACCTAAGTGCGTGCTGCCTCCCGATGGAAGATCTGAT
GGACGTGGACATGAGCTCCCTGAGGCCCCAGAACTATCTTTTTGGTTGTGAACTAAAGGCTGACAAAGATTGTCA
CTTTAAGGTGGATAATGATGAAAATGAGCGCCAGTTGTCTTTAAGAACGGTCAGTTTAGGGGCTGGTGCAAAGGA
TGAATTGCACATTGTTGAAGCAGAGGCAATGAATTACGAAGGCAGCCCAATTAAAGTAACACTGGCAACTTTGAA
AATGTCTGTACAGCCAACGGTTTCCCTTGGGGGCTTTGAAACAACACCACCAGTAGTCTTAAGGTTGAAGTGTGG
TTCAGGGCCAGTGCAATATTAGTGGACAGCACTTAGTAGCTGTGGAGGAAGATGCAGAGTCAGAAGATGAAGAGGA
GGAGGATGTGAACTCTTAAGTATATCTGGAAAGCGATCTGCCCTCGGAGGTAGTAGCAAGCTTCCACAGAAAAA
AGTAAACTTGCTGCTGATGAAGATGATGATGATGATGAAGAAGATGATGATGATGAAGATGATGATGATGATTTT
TAATGATGAGGAAGCTGAAGAAAAAGTGCCAGTGAAGAAAGGACAAGAATCTTTCAAAAAACAGGAAAAAACTC
CTAAACACCAAAAGGACCTAGTTCTGTAAAAGACATTAAAGCAAAAAATGCAAGCAAGTATAGAAAAAGGTGGTT
CTCTTCCCAAAGTGGAAGCCAAGTTCATCAATTACGTGAAGAATTGCTTCCGGATGACTGACCAAGAGGCTATTC
AAGATCTCTGGCAGTGGAGGAAGTCTCTTTAAGAAAATAGTTTAAACAATTTGTTAAAAATTTCCGTCTTATTT
CATTTCTGTAACAGTTGATATCTGGCTGTCCTTTTTATAATGCAGAGTGAGAACTTCCCTACCGTGTTTGATAA
ATGTTGTCCAGGTTCTATTGCCAAGAATGTGTTGTCCAAAATGCCTGTTTAGTTTTTAAAGATGGAAGTCCACCC
TTTGCTTG

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FIGURE 2559

GCTCCTTCTAGGATCTCCGCCTGGTTTCGGCCCCGCCTGCCTCCACTCCTGCCTCCACCATGTCCATCAGGGTGATC
CAGAAGTCCTACAAGGTGTCCACCTCTGGCCCCCGGGCCTTCAGCAGCCGCTCCTACACGAGTGGGCCCCGGTGCC
CACATCAGCTCCTCGAGCTTCTCCTGAGTGGGCAGCAGCAGCTTTCGGGGTGGCCTGGGAGGCGGGCTATAGTGGG
GCCAGCGGCATGGGAGGCATCACCGCAGTCATGGTCAACCAGAGCCTACTGAGCCCCCTTGTCTGGAGGTGGAC
CCCAACATCCAGGCTGTGTGCACCCAGGAGAAGGAGCAGATCAAGACCCTCAACAACAAGTTTGCCTCCTTCACA
GACAAGGTACGGTTCCTGGAGCAGCAGAACAAGATGCTGGAGACCAAGTGGAGCCTCCTGCAGCAGCAGAAGATG
GCTCGGAGCAACATGGACAACATGTTCGAGAGCTACATCAACAACCTTAGGCGGCAGCTGGAGACTCTGGGCCAG
GAGAAGCTGAAGCTGGAGGCGGAGCTTGGCAACATGCAGAGGCTGGTGGAGGACTTCAAGAACAAGTATGAGGAT
GAGATCAATAAGCATACAGAGATGGAGAATGAATTTGTCTCATCAAGAAGGATGTGGATGAAGCTTACATGAAC
AAGGTAGAGCTGGAGTCTCGCCTGGAAGGGCTGACTGACGAGATCAACTTCCTCAGGCAGCTGTACGAAAAGGAG
ATCCGGGAGCTGCAGTCCCAGATCTCGGACACATCTGTGGTGTGTCCATGGACAACAGCCGCTCCCTGGACATG
GACAGCATCATTGCTGAGGTCAAGGCACAGTACGAGGATATTGCCAACCAAGACGGGCTGAGGCTGAGAGCATG
TACCAGATCAAGTATGAGGAGCTGCAGAGTCTGGCTGGGAAGCACGGGGATGACCTGTGGCGCACAAAGACTGAG
ATCTCTGAGATGAACTGGAACATCAGCCAGCTCCAGGCTGAGATTGAGGGCCTCAAAGGCCAGAGGGCTTCCCTG
GAGGCCGCCATTGCAGATGCCGAGCAGCGTGGAGAGCTGGCCATTAAGGATGCCAACGCCAAGTTGTCCGAGCTG
GAGGCTGCCCTGCAGCGGGCCAAGCAGGACATGGCACGGCAGCTGCGTGAGTACCAGGAGCTGATGAACGTCAAG
CTGGCCCTGGACATCGAGATCGCCACCTACAGGAAGCTGCTGGAGGGCAAAGAGAGCCGGCTGAAGTCTGGGATG
CAGAACATGAGTATTCATACGAAGACCACCAGCGGCTATGCAGGTGGTCTGAGCTCGGCCTATGGGGGCCTCACA
AGCCCCGGCCTCAGCTACGGCCTGGGCTCCAGCTTTGGCTCTGGCGCAGGCTCCAGCTCCCTCAGCCGCACCAGT
TCCTCCAGGGCCGTGGTTGTGAAGAAGATCGAGACATGTGATGGGAAGCTGGTGTCCGAGTCTCTGACATCCTG
CCCAAGTGAACAGCTGTGGCAGCCCCCTCCAGCCTACCCCTCCTGCGCTGCCCCAGAGCCTGAGAAGGAGGCCAC
TATTCAGGGTAGCACTGGGAACAGGAGACCCACCTGAGGCTCAGCCCTAGCCCTCAGCCACCTGGGGAGTTTAC
TACCTGGGGACCCCCCTTGCCCATGCCTCCAGCTACAAAACAATTCAATTGCTTTTTTTTGGTCCAAAATAAAAC
CTCAGCTAGCTCTGCCAA

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FIGURE 2560

GAGTGGGCAGCAGCAGCTTTTCGGGGTGGCCTGGGAGGCGGCTATAGTGGGGCCAGCGGCATGGGAGGCATCACCG
CAGTCATGGTCAACCAGAGCCTACTGAGCCCCCTTGTCTGGAGGTGGACCCCAACATCCAGGCTGTGTGCACCC
AGGAGAAGGAGCAGATCAAGACCCTCAACAACAAGTTTGCCTCCTTCACAGACAAGGTACGGTTCCTGGAGCAGC
AGAACAAGATGCTGGAGACCAAGTGGAGCCTCCTGCAGCAGCAGAAGATGGCTCGGAGCAACATGGACAACATGT
TCGAGAGCTACATCAACAACCTTAGGCGGCAGCTGGAGACTCTGGGCCAGGAGAAGCTGAAGCTGGAGGCGGAGC
TTGGCAACATGCAGAGGCTGGTGGAGTCTGGGATGCAGAACATGAGTATTCATACGAAGACCACCAGCGGCTATG
CAGGTGGTCTGAGCTCGGCCTATGGGGGCCTCACAAGCCCCGGCCTCAGCTACGGCCTGGGCTCCAGCTTTGGCT
CTGGCGCAGGCTCCAGCTCCCTCAGCCGCACCAGTTCCTCCAGGGCCGTGGTTGTGAAGAAGATCGAGACATGTG
ATGGGAAGCTGGTGTCCGAGTCCTCTGACATCCTGCCCAAGTGAACAGCTG

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FIGURE 2561

CTGGGAGGCGGCTATAGTGGGGCCAGCGGCATGGGAGGCATCACCAGTCATGGTCAACCAGAGCCTACTGAGC
CCCCTTGTCTGGAGGTGGACCCCAACATCCAGGCTGTGTGCACCCAGGAGAAGGAGCAGATCAAGACCCCTCAAC
AACAAGTTTGCCTCCTTCACAGACAAGGTACGGTTCCTGGAGCAGCAGAACAAGATGCTGGAGACCAAGTGGAGC
CTCCTGCAGCAGCAGAAGATGGCTCGGAGCAACATGGACAACATGTTTCGAGAGCTACATCAACAACCTTAGGCGG
CAGCTGGAGACTCTGGGCCAGGAGAAGCTGAAGCTGGAGGCGGAGCTTGGCAACATGCAGAGGCTGGTGGAGGAC
TTCAAGAACAAGTATGAGGATGAGATCAATAAGCATACAGAGATGGAGAATGAATTTGTCCTCATCAAGAAGGAT
GTGGATGAAGCTTACATGAACAAGGTAGAGCTGGAGTCTCGCCTGGAAGGGCTGACTGACGAGATCAACTTCCTC
AGGCAGCTGTACGAAAAGGAGATCCGGGAGCTGCAGTCCCAGATCTCGGACACATCATTGCTGAGGTCAAGGCAC
AGTACGAGGATATTGCCAACCAAGACGGGCTGAGGCTGAGAGCATGTACCAGATCAAGTATGAGGAGCTGCAGA
GTCTGGCTGGGAAGCACGGGGATGACCTGTGGCGCACAAAGACTGAGATCTCTGAGATGAACTGGAACATCAGCC
AGCTCCAGGCTGAGATTGAGGGCCTCAAAGGCCAGAGGGCTTCCCTGGAGGCCGCCATTGCAGATGCCGAGCAGC
GTGGAGAGCTGGCCATTAAGGATGCCAACGCCAAGTTGTCCGAGCTGGAGGCTGCCCTGCAGCGGGCCAAGCAGG
ACATGGCACGGCAGCTGCGTGAG

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FIGURE 2562

TCTCCGGTCCGTGCCTCCAAGATGACAAAGAAAAGAAGGAACAATGGTCGTGCCAAAAAGGGCCGCGGCCACGTG
CAGCCTATTTCGCTGCACTAACTGTGCCCCGATGCATGCCCAAGGACAAGGCCATTAAGAAAATTCGTCATTTCGAAAC
ATAGTGGAGGCCGCGCAGCAGTCAGGGACATTTCTGAAGCGAGCATCTTTGATGCCTATTTGCTTCCCAAGCTGTAT
GTGAAGCTACATTACTGTGTGAGTTGTGCAATTCACAGCAAAGTAGTCAGGAATCGATCTCGTGAAGCCTGCAAG
GACCGAACACCCCCACCCAATTTAGACCTGCGGGTGCTGCCCCACGTCCCCACCAAAGCCCATGTAAGGAGCT
GAGTTCTTAAAGACTGAAGACAGGCTATTCTCTGGAGAAAAATTAAATGGAACTGTACTTA

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FIGURE 2563

AGGCGGGGGCGGTGCCATGACGCGCCTCGGGGGCGGTCTCGGGCGCGCACCGCTCTCTTACACTCGGGCCTCAG
AAGTCCGTGCCAGTGACCGGAGGCGGCGGCGGCGAGCGGTTCCCTTGTGGGCTAGAAGAATCCTGCAAAAATGTCT
CTCTATCCATCTCTCGAAGACTTGAAGGTAGACAAAGTAATTCAGGCTCAAACCTGCTTTTTCTGCAAAACCTGCC
AATCCAGCAATTTTGTGAGAAGCTTCTGCTCCTATCCCTCACGATGGAAATCTCTATCCAGACTGTATCCAGAG
CTCTCTCAATACATGGGGCTGAGTTTAAATGAAGAAGAAATACGTGCAAATGTGGCCGTGGTTTCTGGTGACCA
CTTCAGGGGCGAGTTGGTAGCAAGACCTTCCAGTATAAACTATATGGTGCTCCTGTAACTGGTAATGATGTTGGA
ATTCGTAGAGCAGAAATTAAGCAAGGGATTTCGTGAAGTCATTTTGTGTAAGGATCAAGATGGAAAAATTGGACTC
AGGCTTAAATCAATAGATAATGGTATATTTGTTTACAGTAGTCCAGGCTAATTCTCCAGCCTCATTGGTTGGTCTG
AGATTTGGGGACCAAGTACTTCAGATCAATGGTGAAAACCTGTGCAGGATGGAGCTCTGATAAAGCGCACAAGGTG
CTCAAACAGGCTTTTGGAGAGAAGATTACCATGACCATTTCGTGACAGGCCCTTTGAACGGACGATTACCATGCAT
AAGGATAGCACTGGACATGTTGGTTTTATCTTTAAAAATGGAAAAATAACATCCATAGTGAAAGATAGCTCTGCA
GCCAGAAATGGTCTTCTCACGGAACATAACATCTGTGAAATCAATGGACAGAATGTCATTGGATTGAAGGACTCT
CAAATTGCAGACATACTGTCAACATCTGGGACTGTAGTTACTATTACAATCATGCCTGCTTTTATCTTTGAACAT
ATTATTAAGCGGATGGCACCAAGCATTATGAAAAGCCTAATGGACCACACCATTCTGAGGTTTAAAAATTCACGG
CACCATGGAAATGTAGCTGAACGTCTCCAGTTTCTTCTTTGGCAACTTCTGTATTATGCACGTGAAGCCTTCCC
GGAGCCAGCGAGCATATGCTGCATGAGGACCTTCTATCTTACATTATGGCTGGGAATCTTACTCTTTCATCTGA
TACCTTGTTTTCAGATTTCAAAATAGTTGTAGCCTTATCCTGGTTTTACAGATGTGAACTTTCAAGAGATTTACTG
ACTTTCCTAGAAATAGTTTCTCTACTGGAACCTGATGCTTTTATAAGCCATTGTGATTAGGATGACTGTTACAGG
CTTAGCTTTGTGTGAAAACCACTCACCTTCTCCTAGGTAATGAGTAGTGCTGTTTCATATTACTTTAGTTCTATA
GCATACTTGCATCTTTAACATGCTATCATAGTACATTTAGAATGATTGCCTTTGATTTTTTTTTTAAATCTGTG
TGTGTGTGTGTAATAAGCAATTAAGAACACTGGTTTTCATTCCATGTAAGCATTAAACAGTGTATGTAGGTTTCA
AGAGATTGTGATGATTCTTAAATTTTAACTACCTTCACTTAATATGCTTGAAGTGTGCGCTTAACTATGTTAAGC
ATCTAGACTAAAAGCCAAAATATAATTATTGCTGCCTTCTTAAAAACCCAAAATGTAGTTCTCTATTAACCTGAA
ATGTACACTAGCCCAGAACAGTTTAAATGGTACTTACTGAGCTATAGCATAGCTGCTTAGTTGTTTTTGGAGATTTT
TTAGTCAACACATAATGGAAACTTCTTTCTTCTAAAAGTTGCCAGTGCCACTTTTAAAGAAGTGAATCACTATATG
TGATGTAAAAGTTATTACACTAAACAGGATAAACTTTTGAAGTCCCTTTTGTTCATTTGTGGATTAAGTGGTATA
ATACTTAATTTTGGCATTGACTCTTAAGATTATGTAACTAGCTACTTTGGGATGGTCTTAGAATATTTTTCTG
ATAACTTGTTTCTTTTCTGACTCCTCCTTGCAAACAAAATGATAGTTGACACTTTATCCTGATTTTTTTCTTCT
TTTTGGTTTATGTCTATTCTAATTAAATATGTATAAATAAAGTTACATTTTAGTCTGTC

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TGCTGCCTACAGCGCTCTGCTCCACCCCTGCTGCCCGCTGGAGCCCTAGTGGCTCCCTCGCTTGGCAACAACACAA
GTCTCATGGCCGCAGCAGCTGCAGCTGCAGCAGTGGCAGCAGCAGGCGGACCTCCAGTCCCTCACTGCCCAGACCA
ACCCCTTCCTCAGCCTGTCTGGGAGCAGACGGCAGTGGCGGTGGCCCCAAAGGAGGGACCGCTGACAAAGGAGCCT
CAGCCAACCAGGAAAAAGGCTAAATCCACCCCTTACCCCTCCTGACCCCCCAAGTGGAGGGGAACAGATCCTGGCCT
GAGGGGTCTTAGCCTGGAGCAGGCGCCTGCGCCCAGACCCCTGGAGAGCCTTGACCCAGAGCCTGTGCTGAGGTCC
AGGGAGTGTGGAGAGCTCCTGGTGTCAAGGACTGAGACTGAGAGGGGAGCCCCCTCCATCTGGCCCCCTTCCCTT
TCTGTACTGTCCGCTTTTGTGAGGCTCAGAGGAAGGACAGTCTGCAAGCCACCTAGGAGGTCCATCCCCAGCAAA
TGTTTTGGAGGTCCCCCAGAGAGCACAGTGGGCCATGGAAGAAGTAGGGGGTTGGTTGGACCTGTCACATGAAA
TGGATCAGCACTTGAATGGGGAGAAGTGGAGGGAGAGGCCCTGGGCCTGTCCCTGCGGGGAAATCTTTTATGGAA
GAAGGGCTGGACCCACTTTACCTGCAGTTTCTTCCAGCTCAGGCAGATGGCAGAAGGGACCCCTTGGACTTTTT
CTCGCCATCCCTCCCCCAGCGCAGGGGCACAAGCTGAGCTTGTAAGCCACAGATGTTGGGGGCTGGAGAAG
GGGCAGGAGAGCATCACACTCAGCCCAGCCTCCTCAACCTCTTGGGGCCCTGTGATGGGGAGGAGACGGCAGGT
GCGGGGAGGCTCCGGCCTTCCCTTGGTGGCCCCGCCCTTTGTTTGCACATTATTGGACTTAGGAGTGCCGAGGGTGGGG
AGATGGAGCTGCCTGACTCAGTGTGTGAGTGTGTGTGCGTGCATGTGTGTGTGTGTGTGTGTGTATGTGTCTGTCT
TGCCCTGTCTCTCTCCTCCTGGACCCAGGGCAGCCAAGGGCAGGGATAGGTGCAGTGGTGCAGATGAAGCAGTGCCA
GAGAGGGGACCTCCCAGCTCTTATTTGCACCCCTCCCCACCTCACCAACTTTGGTCCCTCTCTGGGGGCATGAATG
GTTAACAAACACCAGAGCAGTACTCCAATATTGGAGAGTCACCTGGGGGCACAGGGCTTTGAATCAGGGTAGTATC
CTGCCCTTCCCTCCCCCTGACCCACATGGTCTCAGGGCCCCCTTAGGGCCCCCTACCCCACTGATAGCTTCTCTCT
TCTCTGGCACAAAGGGGAGCCCCAGGGCTTGGGGGAGGGCGTAAGGTGGGGGGAAATGCCACAGCTTTTAGCAAAA
GCCCTCCCTCCCAGAATTAGCCAGCTTGCCCTCCTGCACCCACCCCCACCAACCAGGGGAGCCACTAAGCTGACTA
ACAACTGTCCCCTCACCCACCAGCTATTTCCCCAGTGTAGAGTGGGCAATTCACCTTCAAAGAGTCCCCACCT
GCCCAGGCCTTTGGCACAGAGGCTGAGTGGACAGTCAGGAGAGAGGGCAGAGGCAAGGC GAAGCCGATGTCCCTG
TTTCAGTTGCACATGGGGTTGGAGCCAGGGTAGGGGTTTCACAGTCTCCCCAGGCTCCGGCCTTGTCTAGTCTCTTT
GCATGTGTGGATTCTTCTGTGTGTTTCTGTTGGGTTTGTGTGTTGGGTATTTTTTTTTTTTTTAATAAAGAAA
AGAAGATGTGTATATTTTTTGGCAACGAC

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FIGURE 2565

CAAGAGTCTAGGTAAGAGTTTGTTCCTGGTGCGGAGGGTCAAGGCCACACCCGGAAACCTAGCGAGGTAAAG
TTGCGTCTTGTTGTAGAGACGACAACCTTCTCCGCTTCCTCGGCGATGCGCGCGTCCGGGAGCGGTATGGCCCAG
AAAACCTGGGAACTGGCCAACAACATGCAGGAAGCTCAGAGTATCGATGAAATCTACAAATACGACAAGAAACAG
CAGCAAGAAATCCTGGCGGCGAACCTTGGGACTAAGGATCACCATTACTTTAAGTACTGCAAAATCTCAGCATTG
GCTCTTCTGAAGATGGTGATGCATGCCAGATCGGGAGGCAATTGGAAGTGATGGGTCTGATGCTAGGAAAGGTG
GATGGTGAAACCATGATCATTATGGACAGTTTTGCTTTGCCTGTGGAGGGCACTGAAACCCGAGTAAATGCTCAG
GCTGCTGCATATGAATACATGGCTGCATACATAGAAAATGCAAAACAGGTTGGCCGCCTTGAAAATGCAATCGGG
TGGTATCATAGCCACCCTGGCTATGGCTGCTGGCTTTCTGGGATTGATGTTAGTACTCAGATGCTCAATCAGCAG
TTCCAGGAACCATTTGTAGCAGTGGTGATTGATCCAACAAGAACAATATCCGCAGGGAAAGTGAATCTTGGCGCC
TTTAGGACATACCCAAAGGGCTACAAACCTCCTGATGAAGGACCTTCTGAGTACCAGACTATTCCACTTAATAAA
ATAGAAGATTTTGGTGTACACTGCAACAATATTATGCCTTAGAAGTCTCATATTTCAAATCCTCTTTGGATCGC
AAATTGCTTGAGCTGTTGTGGAATAAATACTGGGTGAATACGTTGAGTTCTTCTAGCTTGCTTACTAATGCAGAC
TATACCACTGGTCAGGTCTTTGATTTGTCTGAAAAGTTAGAGCAGTCAGAAGCCCAGCTGGGACGAGGGAGTTTC
ATGTTGGGTTTAGAAACGCATGACCGAAAATCAGAAGACAACTTGCCAAAGCTACAAGAGACAGCTGTAAACT
ACCATAGAAGCTATCCATGGATTGATGTCTCAGGTTATTAAGGATAAACTGTTAATCAAATTAACATCTCTTAA
ACAGTCTCTGAGAAGTACTTTACCTGAAAGACAGTATGAGAAAAATATTCAAGTAACACTTTAAAACAGTTACC
CAAAATCTGATTAGAAGTATAAGGTGCTCTGAAGTGTCTTAAATATTAATATCCTGTAATAAAGCTCTTTAAAT
GA

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FIGURE 2566

MAASGSGMAQKTWELANNMQEAQSIDEIYKYDKKQQQEILAA NLGTDH HYFKYCKISALALLKMVMHARSGGNL
EVMGLMLGKVDGETMIIMDSFALPVEGTETRVNAQAAAYEYMAAYIENAKQVGRLENAIGWYHSHPGYGCWLSGI
DVSTQMLNQFQEPFVAVVIDPTRTISAGKVN LGAFRTYPKGYKPPDEGPSEYQTIPLNKIEDFGVHCKQYYALE
VSYFKSSLD RKLLELLWNKYWVNTLSSSSLLTNADYTTGQVFDLSEKLEQSEAQLGRGSFMLGLETHDRKSEDKL
AKATRDSCKT TIEAIHGLMSQVIKDKLFNQINIS

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FIGURE 2567

GGCAGAGGGGGAGGCGGCGGCGAGTCGGTGAGCAGCTGGGAAGAGCAGAACCGGGGCGGAGCACCTGCAGGCGC
GGGCGGCGGCCCCACCAATGGCGATTTCGCAAGAAAAGCACCAGAGCCCCCAGTGCTGAGCCACGAATTCGTCCCT
GCAGAAATCACGCGGACATCGTCTCCTGTGTGGCGATGGTCTTCCTGCTGGGGCTCATGTTTGAGATAACGGCAAA
AGCTTCTATCATTTTTTGTACTCTTCAGTACAATGTACCCTCCCAGCAACAGAAGAACAAGCTACTGAATCAGT
GTCCCTTTATTACTATGGCATCAAAGATTTGGCTACTGTTTTCTTCTACATGCTAGTGGCGATAATTATTTCATGC
CGTAATTCAAGAGTATATGTTGGATAAAATTAACAGGCGAATGCACTTCTCCAAAACAAAACACAGCAAGTTTAA
TGAATCTGGTCAGCTTAGTGCGTTCTACCTTTTTGCCTGTGTTTGGGGCACATTCTCATCTCTGAAAACTA
CATCTCAGACCCAACTATCTTATGGAGGGCTTATCCCATAACTGATGACATTTCAAATGAAGTTTTTCTACAT
ATCACAGCTGGCTTACTGGCTTCATGCTTTTCTGAACCTCTACTTCCAGAAAACCAAAAAGAAGATATTCCTCG
TCAGCTTGTCTACATTGGTCTTTACCTCTTCCACATTGCTGGAGCTTACCTTTTGAACCTTGAATCATCTAGGACT
TGTTCTTCTGGTGCTACATTATTTTGTGAAATTTCTTTTCCACATTTCCCGCCTGTTTTATTTTAGCAATGAAAA
GTATCAGAAAGGATTTTCTCTGTGGGCAGTTCTTTTTGTTTTGGGAAGACTTCTGACTTTAATCTTTTCAGTACT
GACTGTTGGTTTTGGCCTTGCAAGAGCAGAAAATCAGAAGCTGGATTTCACTACTGGAACTTCAATGTGTTAGC
TGTTAGAATCGCTGTTCTGGCATCCATTTGCGTTACTCAGGCATTTATGATGTGGAAGTTCATTAATTTTCAGCT
TCGAAGGTGGAGGGAACATTCTGCTTTTTCAGGCACCAGCTGTGAAGAAGAAACCAACAGTAACTAAAGGCAGATC
TTCTAAAAAAGGAACAGAAAATGGTGTGAATGGAACATTAACCTCAAATGTAGCAGACTCTCCCCGGAATAAAAA
AGAGAAATCTTCAATAATGAATTATAAACTAATTGATTAATGTCCCCAAAGAAATCTGCTTTTCTACTATATCTTTC
AGCATTAGAGATTTTTCTGTTCTTGAAAATACAGTCTGTGCTCTTTGATTTTTGCTATTGTACGGTTTCATGCAT
TTTTTTAAAGGGCATTGAGGGGAGGATTATTGCTATGAATGAAAAAATATTTTAGCTTAGACTAAGCTACCTG
CCTTCAAATAGTTTGGGACCACCACCATATTTTATTTTGTTTTTATTTTTGAACATTTTCTAATGATTTGGA
GAGAAAATATTTACAAAAATTCACATATCAGTGATACAATTTCTTGCTGTCACCAATTTTTTATAATAGCAGA
GTGGCCTGTTCTAAGAAGGCCATATTTTTTAAGTTATCTTTCAGGGTAACATGGAATACTATAAAGTTGGATGT
CAAACTTTAATATGTTTTAGTGTTCTCTAATTTTTTGAATTTTTGTAGACTTTACACCTGGAAAAAAGATTT
GTAAATCACCGGAACAATTGTGTGCTTTATTTTATAGGTAGTGGTTATTAGTATTACATCCCCATTTTAAAAAC
AAAAACATAATAATGGTTACAACACGTGGAGTTTTACTAACATACATATTAAATCAAAGTATATTCTTAAAAGTA
CTTGTAAGTAAATCTTTCTTGTCATTTTCAATACTTGTAACCTGGAAATCAGAAAATATTACTATGAACAG
GAAAATCTGACATATAGCCCTTTTTGATATGTTTATTAATAATGATTCTTAATGGGGCTCATAATAAGTTTAATA
TGCACAGCATCTTAGAAAAGTTTAACTGCAAACACTTTTAAAACATAATGCCTACTTGATTTATCTATAAAAA
AGACTGACAGGTAATTATATTTGGAAAAATTTAATGCACTAACTTTAAAGAAATTGAAAATTCAGGTGGATAAA
TAGTCTTACAAAAGACAATGTGCTTTATGTTATACCTATAGCTTTGGTCCCATCTTAATTGAGAAAACATTTATC
TGTATAAAACATATTTTTGGATAAATATATATATATATATTTGTATCGCTACAGAAAGGCTCTAAAAAGCATTG
AGGAAAATATTTGGTTCCCTTTTCTATAATCATCCTTTAAGATTCTTATAGCTACATTTGGTTTATTTCATCATAT
TTACAGTATATATATTGTTCTTTTCAGTGTTTCACATCTTGTTCCCATTTTCTCACTTGTTGTCACCAGCTGTTTGT
GCCATTTTTAGTGTAAGGTTGCAGACCTATTAGATCTGCAGTTTAAAGTTGCCATGCTGCTAGGAAATTGTCCCTT
TTTCTTTCTAGCTGTTAACCTACTTCTGGAAGAAAGTAGTAGCTCTCTGTAGCATTATGGAGTTTCAGTGGAACC
AAATTTTTGCCATTAAAAACTGGCATTATACTGAACATATACATTGAGAAATCAATCAAAAATAAAAAATTTTTACTT
TCACAAAAAATAAAAAA

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FIGURE 2568

MAIRKKSTKSPPVLSHEFVLQNHADIVSCVAMVFLGLMFEITAKASIIFVTLQYNVTLPATEEQATESVSLYYY
GIKDLATVFFYMLVAIIHAVIQEYMLDKINRRMHFSKTKHSKFNESGQLSAFYLFACVWGTFILISENYISDPT
ILWRAYPHNLMTFQMKFFYISQLAYWLHAFPELYFQKTKKEDIPRQLVYIGLYLFHIAGAYLLNLNHLGLVLLVL
HYFVEFLFHISRLFYFSNEKYQKGFSLWAVLFLVLRLLTLILSVLTVGFGLARAENQKLDFTGNGFNVLA VRIAV
LASICVTQAFMMWKFINFQLRRWREHSAFQAPAVKKKPTVTKGRSSKKGTENGVNGLTNSNVADSPRNKKEKSS

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FIGURE 2569

CCTCTTTTTCCGGCTGGAACCATGGAGGGTGTAGAAGAGAAGAAGAAGGAGGTTCCCTGCTGTGCCAGAAACCCCTT
AAGAAAAAGCGAAGGAATTTTCGCAGAGCTGAAGATCAAGCGCCTGAGAAAGAAGTTTGCCCAAAGATGCTTCGA
AAGGCAAGGAGGAAGCTTATCTATGAAAAAGCAAAGCACTATCACAAGGAATATAGGCAGATGTACAGAACTGAA
ATTGCAATGGCGAGGATGGCAAGAAAAGCTGGCAACTTCTATGTACCTGCAGAACCCAAATTGGCGTTTGTATC
AGAATCAGAGGTATCAATGGAGTGAGCCCAAAGGTTGAAAGGTGTTGCAGCTTCTTCGCCTTCGTCAAATCTTC
AATGGAACCTTTGTGAAGCTCAACAAGGCTTCGATTAACATGCTGAGGATTGTAGAGCCATATATTGCATGGGGG
TACCCCAATCTGAAGTCAGTAAATGAACTAATCTACAAGCGTGGTTATGGCAAATCAATAAGAAGCGAATTGCT
TTGACAGATAACGCTTTGATTGCTCGATCTCTTGGTAAATACGGCATCATCTGCATGGAGGATTGATTCATGAG
ATCTATACTGTTGGAAAACGCTTCAAAGAGGCAAATAACTTCCTGTGGCCCTTCAAATTGTCTTCTCCACGAGGT
GGAATGAAGAAAAAGACCACCCATTTTGTAGAAGGTGGAGATGCTGGCAACAGGGAGGACCAGATCAACAGGCTT
ATTAGAAGAATGAACTAAGGTGTCTACCATGATTATTTTCTAAGCTGGTTGGTTAATAAACAGTACCTGCTCTC
AAATTGAAAAAA

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FIGURE 2570

MEGVEEKKKEVPAVPETLKKKRRNFAELKIKRLRKKFAQKMLRKARRKLIYEKAKHYHKEYRQMYRTEIRMARMA
RKAGNFYVPAEPKLAFVIRIRGINGVSPKVRKVLQLLRQLRQIFNGTFVKLNKASINMLRIVEPYIAWGYPNLKSV
NELIYKRGYKINKKRIALTDNALIARSLGKYGIICMEDLIHEIYTVGKRFKEANNFLWPFKLSSPRGGMKKKTT
HFVEGGDAGNREDQINRLIRRMN

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FIGURE 2571

CTCGCGCCAGCAGTTTTTTGGCTTTCACCCCCCATCAGTGACCAAAGACTTGACCACTCAAAGTCCAGCTCCCCAG
AACACTGCTCGACATGGAAACCAGTGTGATTGAAGGTGGATTAAATATCACTCTCACCATCCGACTACTTATGCA
TGGAAGGAAGTTGGCAGTATCATCGGAAAGAAAGGAGAATCAGTTAAGAAGATGCGCGAGGAGAGTGGTGCACC
TATCAACATCTCAGAAGGGAATTGTCCTGAGAGAATTATCACTTTTGCTGGACCTGCTAATGCCGTCTTCAAAGG
CTTTGCTATGATCATTGACAACTGGAAGAGGACATAAGCAGCTCTATGACCAGTAGCACAGCTGCCAGTAGACC
CCCAGTCACCCTGAGGCTGGTGGTCCCTGCTAGTCAGTGTGGCTCTCTCATTGGAAAAGGTGGTTGCAAGATCAA
GGAAATACGAGAGAGTACAGGGGCTCAGGTCTAGATGGCAGGGGATATGCTACCCAACTCAACTGAGCAGGCCAT
CACTATTGCTGGCATCCCACAATCCATCATTGAGTGTGTCAAACAGATCTGTGTGGTCATGTTGGAGTCCCCCCC
GAAGGGCGTGACCATCCCGTACCAGCTCAAGCCTTCCAGCTCTCCGGTCATCTTTCAGGCGGTCAGGCCTATAC
CCTTCAAGGACAGTTTGCCATTCCACAGCCAGATTGACCATGCTGCACCAGTTGGCAATGCAACAGTCTCATTTT
TCCCATGACGCATGGCAACACTGGATTCAGTGCAGGTTTGGATACATCTGCTCAGACTACTTCTCATGAACCTTAC
CATTCCAAACGATTTGATTGGCTGCATAATCGGGCGTCAAGGCGCCAAAATAAATGAGATCCGTCAGATGTCTGG
GGCAGAGATCAAATTGCGAACCCAGTGGAAAGGATCTACTGATAGGCAGGTTACCATCACTGGATCTGCTGCCAG
CATTAGCCTGGCTCAATATCTAATCAATGTCAGGCTTTCCTCGGAGACGGGTGGCATGGGGAGCAGCTAGAACAA
TGCAGATTTATCCACAATCCCTTTCTGCTGTTACCACCACCCATGATCCATCTGTGTAGTTTCTGAACAGTCAG
CGATTTTCAGGTTTTAAATAGTTTGTAAATTTTCAGTTTCTACACACTTTATCATCCACTCGTGATTTTTTACTTA
AAGTGTTTTAATTCCTTT

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FIGURE 2572

CCCGGCCGGCCGCCCATAGCCAGCCGTCCGTACCTCTTCACCGCCCCCTCAGACCGCCCCAAGGTCCCCCGCC
GCCGCTCCAGCGCCGCCGCTGCAGCCGCCTCTCTTTAGTCGCCGCCATGGCGACCCCGTCCACCTCGCAGGAGCG
CCAGGACTACAACCAGGACTCAGAGGCCGCCATCAACCGCCACATCAACCTGGAGCTCTGCGCCTCCTACTTTTA
CCTGTCCATGTCTTATACTTTGACCGCGATGATGTGGCTTTGAAGAACTTTGCCAAATACTTTCTTTACCAATCT
CATGAGGAGAGGGAACATGCTGAGAACTGATGAAGCTGCAGAACCAACGAGGTGGCCGAATCTTCCTTCAGGAT
ATCAAGAAACCAGACTGTGATGACTGGGAGAGCGGGCTGAATGCGATGGAGTGTGCATTATATTTGGAAAAAAT
GTGAATCAGTCACTACTGGAAGTGTACAACTGGCCACTGACAAAAATGACCCCCATTTGTGTGACTTCATTGAG
ACACATTACCTGAATGAGCAGGTGAAAGCCATCAAAGAATTGAGTGACCACGTGACCAACTTGCGCAAGATGGGA
GCGCCCGAATCTGGCTCGGCAGAAATATCTCTTCGACAAGCACACCCTGGGAGACAGTGATAATGAAAGCTAAGTC
TCAGGCTAATTTCCCCATAGCCGTGGGGTGCCTTCCTTGGTCACCAAGGCAGTGCCTGCACGTTAGGGTTTCCTT
TACCTTTTCTATAAGTTGTACCAAAACATCCACTTAAGTTCTTTGATTTGTACCATTCTTCAAATAAAGAAATT
TGGTACCAAAATAATTAATAAATAAAAAATTAAAAAAA

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FIGURE 2573

MKLQNQRGGRIFLQDIKKPCDDWESGLNAMECALYLEKNVNQSLLELYKLATDKNDPHLCDFIETHYLNEQVKA
IKELSDHVTNLRKMGAPESGSAEYLFDKHTLGDSDNES

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FIGURE 2574

CCGCCGCTGCAGCCGCCTCTCTTTAGTCGCCGCCATGGCGACCCCGTCCACCTCGCAGGAGCGCCAGGACTACAA
CCAGGACTCAGAGGCCGCCATCAACCGCCACATCAACCTGGAGCTCTGCGCCTCCTACTTTTACCTGTCCATGTC
TTATACTTTGACCGCGATGATGTGGCTTTGAAGAACTTTGCCAAATACTTTCTTTACCAATCTCATGAGGAGAGG
GAACATGCTGAGAACTGATGAAGCTGCAGAACCAACGAGGTGGCCGAATCTTCCTTCAGGATATCAAGAAACCA
GACTGTGATGACTGGGAGAGCGGGCTGAATGCGATGGAGTGTGCATTATATTGGAAAAAAATGTGAATCAGTCA
CTACTGGAAGTGTACAACTGGCCACTGACATGAAAGCCATCAAAGAATTGAGTGACCACGTGACCAACTTGCGC
AAGATGGGAGCGCCCGAATCTGGCTCGGCAGAATATCTCTCGACAAGCACACCCTGGGAGACAGTGATAATGAA
AGCTAAGTCTCAGGCTAATTTCCCATAGCCGTGGGGTGCCTTCCTTGGTCACCAAGGCAGTGCGTGCACGTTAG
GGTTTCCTTTACCTTTTCTATAAGTTGTACC

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FIGURE 2575

ACCGCCGACGCAGACCCCTCTCTGCACGCCAGCCCGCCCGCACCCACCCATGGCCACAGTTCAGCAGCTGGAAGGA
AGATGGCGCCTGGTGGACAGCAAAGGCTTTGATGAATACATGAAGGAGCTAGGAGTGGGAATAGCTTTGCGAAAA
ATGGGCGCAATGGCCAAGCCAGATTGTATCATCACTTGTGATGGTAAAAACCTCACCATAAAAACTGAGAGCACT
TTGAAAACAACACAGTTTTCTTGTACCCTGGGAGAGAAGTTTGAAGAAACCACAGCTGATGGCAGAAAACTCAG
ACTGTCTGCAACTTTACAGATGGTGCATTGGTTCAGCATCAGGAGTGGGATGGGAAGGAAAGCACAATAACAAGA
AAATTGAAAGATGGGAAATTAGTGGTGGAGTGTGTCATGAACAATGTCACCTGTACTCGGATCTATGAAAAAGTA
GAATAAAAATTCCATCATCACTTTGGACAGGAGTTAATTAAGAGAATGACCAAGCTCAGTTCAATGAGCAAATCT
CCATACTGTTTCTTTCTTTTTTTTTTTTCACTACTGTGTTCAATTATCTTTATCATAAACATTTTACATGCAGCTAT
TTCAAAGTGTGTTGGATTAAATTAGGATCATCCCTTTGGTTAATAAATAAATGTGTTTGTGCT

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FIGURE 2576

MATVQQLEGRWRLVDSKGFDEYMKELGVGIALRKMAMAKPDCIITCDGKNLTIKTESTLKTTQFSCTLGEKFEE
TTADGRKTQIVCNFTDGALVQHQEWDGKESTITRKLKDGKLVVECMNNVTCTRIYEKVE

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FIGURE 2577

GCTACCTACAGAGGGGTCCATACGGCGTTGTTCTGGATTCCCGTCGTAACCTTAAAGGGAACTTTACAATGTCC
GGAGCCCTTGATGTCCTGCAAATGAAGGAGGAGGATGTCCTTAAGTTCCTTGCAGCAGGAACCCACTTAGGTGGC
ACCAATCTTGACTTCCAGATGGAACAGTACATCTATAAAAGGAAAAGTGATGGTATCTACATCATAAATCTGAAG
AGGACCTGGGAGAAGCTTCTGCTGGCAGCTCGTGCCATTGTTGCCATTGAAAACCCCTGCTGATGTCAGTGTTATA
TCATCCAGGAATACTGGCCAGAGGGCTGTGCTGAAGTTTGCTGCTGCCACTGGAGCCACTCCAATTGCTGGCTGC
TTCACTCCTGGAACTTTCACTAACCAGATCCAGGCAGCCTTCCAGGAGCCACGACTTCTTGTTGGTTACTGACCCC
AGGGCTGACCACCAGCCTTTACGGAGGCATCTTATGTTAACCTACCTACCATTGCTCTGTGTAACACAGATTCT
CCTCTGCGCTATGTGCACATTGCCATCCCATGCAACAACAAGGGAGCTCACTCAGTGGGTTTGATGTGGTGGATG
CTGGCTTGGAAGTTCTGTGCATGCGTGGCACCATTTCCTGTAACACCCGTGGGAGGTCATGCCTGATTTCTGC
TTCTACAGAGATCCTGAAGAGATTGAAAAAGAAGAGCAGCCTGCTGCTGAAAAGGCTGTGACCAAGGAGGAATTT
CAGGGTGAAAGGACTGCTCCAGCTCCTGAGTTCACTGCTACTCAGCCTGAGGTTGCAGACTGGTCTGAAGGTGTG
CAGGTGCCCTCTGTGCCTATTACAGCAGTTCCCTACTGAAGACTGCAGCGCTCAGCCTGCCACGGAAGACTGGTCT
GCAGCTCCCACTGCCAGGCCACTGAATGGGTAGGAGCAACCACTGAATGGTCTTAAGCTGTTCTTGATAGGCT
CTTAAGCAATATGGAAAAATGGTGGATGGAAAATAAACATCAGTTTCT

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FIGURE 2578

MSGALDVLQMKEEDVLKFLAAGTHLGGTNLDFQMEQYIYKRKSDGIYIINLKRTWEKLLLAARAIVAIENPADVS
VISSRNTGQRAVLKFAAATGATPIAGCFTPGTFTNQIQAQFQEPRLLVVTDPRADHQPFTASYVNLPTIALCNT
DSPLRYVHIAIPCNNKGAHSVGLMWWMLAWEVLCMRGTISRHPWEVMPDFCFYRDPEEIEKEEQPAAEKAVTKE
EFQGERTAPAPEFTATQPEVADWSEGVQVPSVPIQQFPTEDCSAQPATEDWSAAPTQAQATEWVGATTEWS

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FIGURE 2579

TGGATGCAGCT**ATGA**ATGCAAGGCCACACAAGGTGGATGGAAGAGTTGTGGAACCAAAGAGAGCCGTCTCAAGAG
AAGATTCTCAAAGACCAGGTGCCCACTTAAGTGTGAAAAAGATATTTGTTGGTGGCATTAAAGAAGACACTGAAG
AACATCACCTAAGAGATTATTTTGAACAGTATGGAAAAATTGAAGTGATTGAAATCATGAGTGACCGAGGCAGTG
GCAAGAAAAGGGGCTTTGCCTTTGTAACCTTTGACGACCATGACTCCGTGGATAAGATTGTCATTAGAAATACC
ATACTGTGAATGGCCACAAGTGTGAAGTTACAAAAGCCCTGTCAAAGCAAGAGATGGCTAGTGCTTCATCCAGCC
AAAGAGGTCGAAGTGGTTCTGGAAACTTTGGTGGTGGTCGTGGAGGTGGTTTCAGTGGGAACGACAACCTTTGGTC
ATGGAGGAACTTCAGTGGTCATGGTGGCTTTGGTGGCAGCCATGGTGGTGGTGGATAIGGTGGCAATGGGGATG
GCTATAATGGATTTGGTAATGATGGAAGCAATTTTGGAGGTGGTGGAGCTACAAGGATTTTGGCAATTACAACA
ATCAGTCTTCAAATTTTGGACCCATGAAGGGAGGAAATTTTGGAGGCAGAAGCTCTGGCCCCCATGGTGGTGGAG
GCCAGTACTTTGCAAAACCACGAAACCAAGGTGGCTATGGCGGTTCCAGCAGCAGCAGTAGCTATGGCAGTGGCA
GAAGATTTT**TAA**TTAGGAAACAAAGCTCAGCAGGAGAGGAGAGCCAGAGAAGTAACAGGGAGCTACAGGTTACAA
CAGATTTGTGAAGTCAAGCAAGCACAGTGGTGGCAGGGCCTAGCTGCTACAAAGAAGACATGTTTTAGACAAATA
CTCATGTGTATGGGCAAAAAACTCGAGGACTGTATTTGTGACTAATTGTATAACAGGTTATTTTAGTTTCTGTTC
TGTGGAAAGTGTAAGCATTCCAACAAAGGGTTTTAATGTAGATTTTTTTTTTGCACCCATGCTGTTGATTGCTAA
ATGTAATAGTCTGATCGTGACACTGAATAAATGTCTTTTTTTTTTAATGTGCTGTGTAAAGTTAGTCTACTCTGAA
GCCATCTTGGTAAATTTCCCCAACAGTGTGAAGTTAGAATTCCTTCAGGGTGATGCCAGGTTCATTTGGAATTT
ATATACAACCTGCTTGGGTGAAGAAGCCATTGTCTTCGGAAACCTTGGTGTAGTTGAAGTATAGTTACTGTTGT
GACCTGAAGTTACCATTAAGGGATTATCCAAGCAAAATCATGGAATTATTGGTTATAAAGTGATTGTTGGT
ACATCCTATGCAATATATCTAAATTGAATAATGGTACCAGATAAAATTATAGATGGGAATGAAGCTTGTGTATCA
TCCATTATCGTATGTAATCAATAAACGATTTAATTCTCTTGAA

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FIGURE 2580

MNARPHKVDGRVVEPKRAVSREDSQRPGAHLTVKKIFVGGIKEDTEHHLRDYFEQYGKIEVIEIMSDRGSGKKR
GFAFVTFDDHDSVDKIVIQKYHTVNGHNCEVTKALSKQEMASASSQRGRSGSGNFGGGRGGGFSGNDNFGHGGN
FSGHGGFGGSHGGGGYGGNGDGYNGFGNDGSNFGGGGSYKDFGNYNQSSNFGPMKGGNFGGRSSGPHGGGGQYF
AKPRNQGGYGGSSSSSSYGSRRF

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FIGURE 2581

AAAGATATTTGTTGGTGGCATTAAAGAAGACACTGAAGAACATCACCTAAGAGATTATTTTGAACAGTATGGAAA
AATTGAAGTGATTGAAATCATGAGTGACCGAGGCAGTGGCAAGAAAAGGGGCTTTGCCTTTGTAACCTTTGACGA
CCATGACTCCGTGGATAAGATTGTCATTAGAAATACCATACTGTGAATGGCCACAACCTGTGAAGTTACAAAAGC
CCTGTCAAAGCAAGAGATGGCTAGTGCTTCATCCAGCCAAAGAGGTCGAAGTGGTTCTGGAACTTTGGTGGTGG
TCGTGGAGGTGGTTTCAGTGGGAACGACAACCTTTGGTCATGGAGGAACTTCAGTGGTCATGGTGGCTTTGGTGG
CAGCCATGGTGGTGGTGGATATGGTGGCAATGGGGATGGCTATAATGGATTTGGTAATGATGGAAGCAATTTTGG
AGGTGGTGGAGCTACAAGGATTTTGGCAATTACAACAATCAGTCTTCAAATTTTGGACCCATGAAGGGAGGAAA
TTTTGGAGGCAGAAGCTCTGGCCCCCATGGTGGTGGAGGCCAGTACTTTGCAAAGCAGAAGATTTTAATTAGG

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FIGURE 2582

TGGATGCAGCTATGAATGCAAGGCCACACAAGGTGGATGGAAGAGTTGTGGAACCAAAGAGAGCCGTCTCAAGAG
AAGATTCTCAAAGACCAGGTGCCCACTTAAGTGTGAAAAAGATATTTGTTGGTGGCATTAAAGAAGACACTGAAG
AACATCACCTAAGAGATTATTTTGAACAGTATGGAAAAATTGAAGTGATTGAAATCATGAGTGACCGAGGCAGTG
GCAAGAAAAGGGGCTTTGCCTTTGTAACCTTTGACGACCATGACTCCGTGGATAAGATTGTCATTCAGAAATACC
ATACTGTGAATGGCCACAAGTGTGAAGTTACAAAAGCCCTGTCAAAGCAAGAGATGGCTAGTGCTTCATCCAGCC
AAAGAGGTCGAAGTGGTTCTGGAACTTTGGTGGTGGTCGIGGAGGTGGTTTCAGTGGGAACGACAACCTTTGGTC
ATGGAGGAACTTCAGTGGTCATGGTGGGGATGGCTATAATGGATTTGGTAATGATGGAAGCAATTTTGGAGGTG
GTGGAAGCTACAAGATTTTGGCAATTACAACAATCAGTCTTCAAATTTTGGACCCATGAAGGGAGGAAATTTTG
GAGGCAGAAGCTCTGGCCCCATGGTGGTGGAGGCCAGTACTTTGCAAACACGAAACCAAGGTGGCTATG

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FIGURE 2583

GGTAGCAGCCATTTAACTGATGTCCTTTTTGTATGATTGTTTCATCACTTAATAAAGGATGAATTCAGTTAATGGAG
AATCATCCTCATTGTCACCAACTGATAATGCGTCTGTCACGGGTACTCCAGTAGTGTCTGAAGAAAATGCCTTGT
CTCCAAATTGCACTAGTACTACTGTTGAAGATCCTCCAGTTCAAGAAATACTGACTTCCTCAGAAAAACAATGAAT
GTATTCCTTCTACCACTGTCAGAAATTGGAATCTGAAGCTAGAAGTATATTAGAGCCTGACACCTCTAATTCTAGAA
GTAGTTCTGCTTTTGAAGCAGCCAAATCAAGACAGCCAGATGGGTGTATGGATCCTGTACGGCAGCAGTCTGGGA
ATGCCAACACAGAAACCTTGCCATCAGGGTGGGAACAAAGAAAAGATCCTCATGGTAGAACCTATTATGTGGATC
ATAATACTCGAACTACCACATGGGAGAGACCACAACCTTTACCTCCAGGTTGGGAAAGAAGAGTTGATGATCGTA
GAAGAGTTTATTATGTGGATCATAACACCAGAACAACAACGTGGCAGCGGCCTACCATGGAATCTGTCCGAAATT
TTGAACAGTGGCAATCTCAGCGGAACCAATTGCAGGGAGCTATGCAACAGTTTAACCAACGATACCTCTATTCGG
CTTCAATGTTAGCTGCAGAAAATGACCCTTATGGACCTTTGCCACCAGGCTGGGAAAAAAGAGTGGATTCAACAG
ACAGGGTTTACTTTGTGAATCATAACACAAAAACAACCCAGTGGGAAGATCCAAGAACTCAAGGCTTACAGAAATG
AAGAACCCTGCCAGAAGGCTGGGAAATTAGATATACTCGTGAAGGTGTAAGGTACTTTGTTGATCATAACACAA
GAACAACAACATTCAAAGATCCTCGCAATGGGAAGTCATCTGT

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FIGURE 2584

AGAGTCCGCGCCCTGCGTCCGCGACCAGGAGGATCGGACCTTCGCCTTCGCTGTGCGCCGCCGCCGCCGCCGCCGCGG
CCGTCGGGGCTATTAGTGAAAGATGGTGGATCGCTTGGCAAACAGTGAAGCAAATACTAGACGTATAAGTATAGT
GGAAACTGTTTTGGAGCAGCTGGTCAACCTTTAACTATACCTGGACGAGTTCTTATTGGAGAAGGAGTATTGAC
TAAGTTGTGCAGGAAAAAGCCCAAAGCAAGGCAGTTTTCTTGTTAATGATATTCTTGATATGGCAATATTGT
CATCCAGAAGAAAAATATAACAAACAACATATTATCCCTGGAAAATGTCACTATTGATTCCATCAAAGATGA
GGGAGACTTAAGGAATGGATGGCTAATCAAGACACCAACTAAATCTTTGTCAGTTTATGCTGCCACTGCTACGGA
GAAATCAGAATGGATGAATCATATAAATAAATGTGTTACTGATTACTCTCCAAAAGTGGGAAGACACCCAGTAA
TGAACATGCTGCTGTCTGGGTTCCCTGACTCTGAGGCAACTGTATGTATGCGTTGTCAGAAAGCAAATTCACACC
TGTTAATCGTCGCCACCATTGCCGCAAATGTGGTTTTGTTGTCTGTGGGCCCTGCTCTGAAAAGAGATTTCTTCT
TCCCAGCCAGTCTCTAAGCCTGTGCGGATTGTGACTTCTGCTATGACCTGCTTTCTGCTGGGGACATGGCCAC
ATGCCAGCCTGCTAGATCAGACTCTTACAGCCAGTCATTGAAGTCTCCTTTAAATGATATGTCTGATGATGATGA
CGATGATGATAGCAGTGACTAAGGACACATTTGGGAGTATTTAATCAGGTGTGGCTATCTGAGAAATCAACTTTG
GGGGAAATGTAAGATTCTGAGCTCTCTCTCTGTTTTGTTCTAGCCATGAATTTGCCTGAGAAACTTGTAACCTAT
GTGCCTCAATATATTCCATAGAAAGTAGGTCCCCCTGCCCTCTCCCACTCCTCACACTCTTCTACAGGGATAGGC
TTTTGCAAATATATCAGATAAATTTTTGTTTTCTTGTTATTTTAGGTTATTTTCTTGGAAGGTTGGGAAAAGA
TGTTTGTTTTAACAGGTCATGTACTACGTTGTTGTTTCATTTCTGTTATAAGTAAAACATAAAGCACAGAATGG
TGGGAAAGGGGCTATAATGTGGTTCATTAATAATGTAGCAGCTTTTTTCTAACCATCCTGTCTAATGGTTAAGA
CACCAGTAACAAAACACATGATTTGGAAATACTTTGGCTTTTTCATATACCTAGTGGTGCCTTATCATAATAGC
ACTGTTACATGAAATAAGCCCTACCTTCTTACTTTCTGGTTTGTGAAAAAATACACTGGTGTCTTTTGAAGTG
ATAAAATGAGTGTTTATGAATGGGTGTAATTAGGAAATACCTCTCATCTGACAGCTACAAATAACTAAGTTTGGA
GGTATTTTCACTCTATATGAATAAATATTTTCCATAAAATAGTTGTGATTATATTTTGTGTTTATATAGGTCCC
AAATTATAATTGTCAAATATATATTTTAAATTAATAAAAGTTGTCATTCTTAGGAATTTGGTTTGAAATTTATCA
GTTATACAGAATTGTCATACTGCATTAGCTTCTACCTTTAGTAAGACATATTTTTTAGGTATAAATCTTATGCT
TTAACATTATTTCTGGATTGAAAATCTTATAAAACCCCTGAAAATAAACAGTCTCTTTTTTACAAAGCCTGTGTT
AGAGCACAGATTTACCTAGGCTTGAAGATTGGGAAGAAATAATATGTAAGAATGGCCTCAAGGCAGACCACTTTA
AGTTTGGCTAGACTTCATATCGTGGAGTATTGTCTATTTTCAGTGTGAAACTATCTTGAATTTGCAAATATAGTG
TTATATTTTATAAAGTTTTGTAAATCCCAAACAATATTTCTATTTTTGTAAACAATTGTATGTATAATCTGTA
TTTGAAATCATTTTGCAATCTATGGAAATAGAGTAGCAATTGCTATTTCTAAATTGTGAACTTAAGTCAATCTA
GATTTATTTTGAGAAGTAATTGTTCACTCTTTACTTTTGAGGCAGCCATTAGGTTGAAAGTATATATTTATCATA
TAAACTTGATGCGTTTTGCACTACTCTTTCCATTTATATGCTGCAAACAACACTACAGTCTTTGAAATATGAAAA
TCAGCAGTCTAAAGTTTGTGTTTAAATCTAAATTTAAAAAATCTTCAAATCTGAATATACCGCAAATGTCATGAG
AAGTTTGATTCAGTAACTTGATGGAGGATTCTTGGTATCTTACTGTTTGGTTAAGGCACTAATTTTACTTAC
CTATTAGATTTTGAAAGTATCTGAGATATACAAATCTCCCTGTAGGAAATGTGAAAGAAAAGCACAAACAAACTA
GGGTTTTTTGTTTCAATTTGCTTGCTTTTATGATTTTTTTGGTTTGTGTTTAAATATCAGGTGGATTTTTGTTTCTAA
GCAATATATACATAAAATCAACCAACATATCTGAAAAGGATCATGAAACCTGAGAAATGCTAATGGAGATTTGCT
GGTACATAGGAATCTAGCAAATTCAGGAACCAAGGGGAAATGTTGTGAGATAACATTTACATTGTCAACCTTTAT
TGACTTTGTTTTTACAATAAAAAATATTTTACAACCTT

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FIGURE 2585

MVDRLANSEANTRRISIVENCFGAAGQPLTIPGRVLIGEGVLTKLCRKKPKARQFFLFNDILVYGNIVIQKKKYN
KQHIIPLENVTIDSIKDEGDLRNGWLIKTPTKSFAVYAATATEKSEWMNHINKCVTDLLSKSGKTPSNEHAAVWV
PDSEATVCMRCQKAKFTPVNRRHHCRKCGFVVCGPCSEKRFLFPSQSSKPVRICDFCYDLLSAGDMATCQPARSD
SYSQSLKSPLNDMSDDDDDDSSD

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FIGURE 2586GGCGGGCTCCAGGCGAGGCGGTGACGCTCCTGAAAACCTTGC GCGCGCGCTCGCGCCACTGCGCCCGGAGCGATG

AAGATGGTCGCGCCCTGGACGCGGTTCTACTCCAACAGCTGCTGCTTGTGCTGCCATGTCCGCACCGGCACCATC
CTGCTCGGCGTCTGGTATCTGATCATCAATGCTGTGGTACTGTTGATTTTATTGAGTGCCCTGGCTGATCCGGAT
CAGTATAACTTTTCAAGTTCTGAAC TGGGAGGTGACTTTGAGTTCATGGATGATGCCAACATGTGCATTGCCATT
GCGATTTCTCTTCTCATGATCCTGATATGTGCTATGGCTACTTACGGAGCGTACAAGCAACGCGCAGCCTGGATC
ATCCCATTTCTTCTGTTACCAGATCTTTGACTTTGCCCTGAACATGTTGGTTGCAATCACTGTGCTTATTTATCCA
AACTCCATT CAGGAATACATACGGCAACTGCCTCCTAATTTTCCCTACAGAGATGATGTCATGTCAGTGAATCCT
ACCTGTTTGGTTCCTTATTATTCTTCTGTTTATTAGCATTATCTTGACTTTTAAGGGTTACTTGATTAGCTGTGTT
TGGAAGTGTACCGATACATCAATGGTAGGAACTCCTCTGATGTCTGGTTTATGTTACCAGCAATGACACTACG
GTGCTGCTACCCCCGATGATGATGCCACTGTGAATGGTGTGCCAAGGAGCCACCGCCACCTTACGTGTCTGCC
TAAGCCTTCAAGTGGGCGGAGCTGAGGGCAGCAGCTTGACTTTGCAGACATCTGAGCAATAGTTCTGTTATTTCA
CTTTTGCCATGAGCCTCTCTGAGCTTGTTTGTGCTGAAATGCTACTTTTAAAAATTTAGATGTTAGATTGAAAA
CTGTAGTTTTCAACATATGCTTTGCTGGAACACTGTGATAGATTAACCTGTAGAATTCCTTCTGTACGATTGGGGA
TATAATGGGCTTCACCTAACCTTCCCTAGGCATTGAAACTTCCCCCAAATCTGATGGACCTAGAAGTCTGCTTTTG
TACCTGCTGGGCCCCAAAGTTGGGCATTTTCTCTCTGTTCCCTCTCTTTTGAAAATGTAAATAAAACCAAAAA
TAGACAACTTTTTCTTCAGCCATTCCAGCATAGAGAACAAAACCTTATGGAAACAGGAATGTCAATTGTGTAATC
ATTGTTCTAATTAGGTAAATAGAAGTCCTTATGTATGTGTTACAAGAATTTCCCCCACAACATCCTTTATGACTG
AAGTTCAATGACAGTTTGTGTTTGGTGGTAAAGGATTTTCTCCATGGCCTGAATTAAGACCATTAGAAAGCACCA
GGCCGTGGGAGCAGTGACCATCTGCTGACTGTTCTTGTGGATCTTGTGTCCAGGGACATGGGGTGACATGCCTCG
TATGTGTTAGAGGGTGGAAATGGATGTGTTTGGCGCTGCATGGGATCTGGTGCCCTCTTCTCTCTGGATTACATC
CCCACCCAGGGCCCGCTTTTACTAAGTGTCTGCCCTAGATTGGTTCAAGGAGGTCACTCAACTGACTTTTATCAA
GTGGAATTGGGATATATTTGATATACTTCTGCCTAACAACATGGAAAAGGGTTTTCTTTTCCCTGCAAGCTACAT
CCTACTGCTTTGAACTTCCAAGTATGTCTAGTCACCTTTTAAAATGTAAACATTTTCAGAAAAATGAGGATTGCC
TTCCTTGATGCGCTTTTACCTTGACTACCTGAATTGCAAGGGATTTTATATATTTCATATGTTACAAAGTCAG
CAACTCTCCTGTTGGTTCATTATTGAATGTGCTGTAAATTAAGTTGTTTGCAATTAACAAGGTTTGCCAC

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FIGURE 2587

MKMVAPWTRFYNSCCLCCHVRTGTILLGVWYLIINAVVLLILLSALADPDQYNFSSSELGGDFEFMDDANMCIA
IAISLLMILICAMATYGAYKQRAAWIIPFFCYQIFDFALNMLVAITVLIYPNSIQEYIRQLPPNFPYRDDVMSVN
PTCLVLIILLFISIILTFKGYLISCVWNCYRYINGRNSSDVLVYVTSNDTTVLLPPYDDATVNGAAKEPPPPYVS
A

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FIGURE 2588

CCTTTCTCGTTCCCCGGCCATCTTAGCGGCTGCTGTTGGTTGGGGGCCGTCCTAAGGCAGGAAGATCGT
GGCCGCAAAGAAGACGAAAAAGTCGCTGGAGTCGATCAACTCTAGGCTCCAACCTCGTTATGAAAAGTGGGAAGTA
CGTCCTGGGGTACAAGCAGACTCTGAAGATGATCAGACAAGGCAAAGCGAAATTGGTCATTCTCGCTAACAACCTG
CCCAGCTTTGAGGAAATCTGAAATAGAGTACTATGCTATGTTGGCTAAAACCTGGTGTCCATCACTACAGTGGCAA
TAATATTGAAGTGGGCACAGCATGCGGAAAATACTACAGAGTGTGCACACTGGCTATCATTGATCCAGGTGACTC
TGACATCATTAGAAGCATGCCAGAACAGACTGGTGAAAAGTAAACCTTTTCACCTACAAAATTTACCTGCAAAC
CTTAAACCTGCAAATTTTCCTTTAATAAAATTTGCTTGTTTTAAAAACATTGTAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2589

MVAAKKTkKSLESINSRLQLVMKSGKYVLGYKQTLKMIRQGKAKLVILANNCPALRKSEIEYYAMLAKTGVHHYS
GNNIELGTACGKYRVCTLAIIDPGDSDIIRSMPEQTGEK

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FIGURE 2590

GCCCACTCCCACCGCCAGCTGGAACCCCTGGGGACTACGACGTCCTCAAACCTTGCTTCTAGGAGATAAAAAGAA
CATCCAGTCAATGGATAAAAATGAGCTGGTTTCAGAAGGCCAAACTGGCCGAGCAGGCTGAGCGATATGATGACATG
GCAGCCTGCATGAAGTCTGTAACCTGAGCAAGGAGCTGAATTATCCAATGAGGAGAGGAATCTTCTCTCAGTTGCT
TATAAAAATGTTGTAGGAGCCCGTAGGTCATCTTGGAGGGTCGTCTCAAGTATTGAACAAAAGACGGAAGGTGCT
GAGAAAAACAGCAGATGGCTCGAGAATACAGAGAGAAAATTGAGACGGAGCTAAGAGATATCTGCAATGATGTA
CTGTCTCTTTTGGAAAAGTTCTTGATCCCCAATGCTTCACAAGCAGAGAGCAAAGTCTTCTATTTGAAAATGAAA
GGAGATTACTACCGTTACTTGGCTGAGGTTGCCGCTGGTGATGACAAGAAAGGGATTGTGATCAGTCACAACAA
GCATACCAAGAAGCTTTTGAAATCAGCAAAAAGGAAATGCAACCAACACATCCTATCAGACTGGGTCTGGCCCTT
AACTTCTCTGTGTTCTATTATGAGATTCTGAACTCCCCAGAGAAAGCCTGCTCTCTTGCAAAGACAGCTTTTGAT
GAAGCCATTGCTGAACTTGATACATTAAGTGAAGAGTCATACAAAGACAGCAGCTAATAATGCAATTACTGAGA
GACAACTTGACATTGTGGACATCGGATACCCAAGGAGACGAAGCTGAAGCAGGAGAAGGAGGGGAAAATTAACCG
GCCTTCCAACCTTTTGTCTGCCTCATTCTAAAATTTACACAGTAGACCATTGTGTCATCCATGCTGTCCCAAAATA
GTTTTTTGTTTACGATTTATGACAGGTTTATGTTACTTCTATTTGAATTTCTATATTTCCCATGTGGTTTTTATG
TTTAATATTAGGGGAGTAGAGCCAGTTAACATTTAGGGAGTTATCTGTTTTTCATCTTGAGGTGGCCAATATGGGG
ATGTGGAATTTTTATACAAGTTATAAGTGTGTCATAGTACTTTGGTACATTGTGGCTTCAAAAGGGCCAGTG
TAAACTGCTTCCATGTCTAAGCAAAGAAAAGTGCCTACATACTGGTTTGTCTGGCGGGGAATAAAAGGGATCA
TTGGTTCCAGTCACAGGTGTAGTAATTGTGGGTACTTTAAGGTTTGGAGCACTTACAAGGCTGTGGTAGAATCAT
ACCCCATGGATACCACATATTAACCATGTATATCTGTGGAATACTCAATGTGTACACCTTTGACTACAGCTGCA
GAAGTGTTCCCTTTAGACAAAGTTGTGACCCATTTTACTCTGGATAAGGGCAGAAACGGTTTACATTCCATTATTT
GTAAAGTTACCTGCTGTAGCTTTTATTATTTTGTACACTCATTTTATTTGTATTTAAATGTTTTAGGCAACC
TAAGAACAAATGTAAAAGTAAAGATGCAGGAAAAATGAATTGCTTGGTATTCACTTTCATGTATATCAAGCAC
AGCAGTAAACAAAAACCCATGTATTTAACTTTTTTTTAGGATTTTGTCTTTTGTGATTTTTTTTTTTTTTTTTT
GATACCTGCCTAACATGCATGTGCTGTAAAAATAGTTAACAGGGAAATAACTTGAGATGATGGCTAGCTTTGTTT
AATGTCTTATGAAATTTTCATGAACAATCCAAGCATAATTGTTAAGAACACGTGTATTAAATTCATGTAAGTGGA
ATAAAAGTTTTATGAATGGACTTTTCAACTACTTTCTCTACAGCTTTTCATGTAAATTAGTCTTGGTTCTGAAAC
TTCTCTAAAGGAAATTGTACATTTTTTGAATTTTATTCCCTATTCCCTCTTGGCAGCTAATGGGCTCTTACCAAG
TTTAAACACAAAATTTATCATAACAAAAATACTACTAATAATACTACTGTTTCCATGTCCCATGATCCCCTCTCT
TCCTCCCCACCCTGAAAAAATGAGTTCCTATTTTTTCTGGGAGAGGGGGGGATTGATTAGAAAAAATGTAGTG
TGTTCCATTTAAATTTTGGCATATGGCATTCTTAACCTTAGGAAGCCACAATGTTCTTGGCCCATCATGACATT
GGGTAGCATTAACTGTAAGTTTTGTGCTTCCAAATCACTTTTTGGTTTTTAAGAATTTCTTGATACTCTTATAGC
CTGCCTTCAATTTTGATCCTTTATTCTTTCTATTTGTCAGGTGCACAAGATTACCTTCCTGTTTTAGCCTTCTGT
CTTGTCACCAACCATTCTTACTTGGTGGCCATGTACTTGAAAAAGGCCGCATGATCTTTCTGGCTCCACTCAGT
GTCTAAGGCACCTGCTTCCTTTGCTTGCATCCACAGACTATTTCCCTCATCCTATTTACTGCAGCAAACTCTCT
CCTTAGTTGATGAGACTGTGTTTATCTCCCTTTAAACCCCTACCTATCCTGAATGGTCTGTCTATTGTCTGCCTTT
AAAATCCTTCCTCTTTCTTCCTCCTCTATTCTCTAAATAATGATGGGGCTAAGTTATACCCAAAGCTCACTTTAC
AAAATATTTCTCAGTACTTTGCAGAAAACACCAACAAAAATGCCATTTTAAAAAAGGTGTATTTTTTCTTTTA
GAATGTAAGCTCCTCAAGAGCAGGGACAATGTTTCTGTATGTTCTATTGTGCCTAGTACACTGTAAATGCTCAA
TAAATATTGATGATGGGAGGCAGTGAGTCTTGATGATAAGGGTGAGAACTGAAATCCC

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FIGURE 2591

MDKNELVQKAKLAEQAERYDDMAACMKSVTEQGAELSNEERNLLSVAYKNVVGARRSSWRVSSIEQKTEGAEEKK
QQMAREYREKIETELRDICNDVLSLLEKFLIPNASQAESKVFYLMKMGDYYRYLAEVAAGDDKKGIVDQSQQAYQ
EAFEISKKEMQPTHPIRLGLALNFSVFYYEILNSPEKACSLAKTAFDEAIAELDTLSEESYKDSTLIMQLLRDNL
TLWTSDTQGDEAEAGEGGEN

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FIGURE 2592

TCTCCGGTCCGTGCCTCCAAGATGACAAAGAAAAGAAGGAACAATGGTCGTGCCAAAAAGGGCCGCGGCCACGTG
CAGCCTATTCGCTGCACTAACTGTGCCCCGATGCGTGCCCAAGGACAAGGCCATTAAGAAATTCGTCAATTCGAAAC
ATAGTGGAGGCCGCAGCAGTCAGGGACATTTCTGAAGTGAGCGTCTTCGATGCCTATGTGCTTCCCAAGCTGTAT
GTGAAGCTACATTACTGTGTGAGTTGTGCAATTCACAGCAAAGTAGTCAGGAATCGATCTCGTGAAGCCCGCAAG
GACCGAACACCCCCACCCCGATTTAGACCTGCGGGTGCTGCCCCACGTCCCCACCAAAGCCCATGTGAGGAGCT
GAGTTCTTAAAGACTGAAGACAGGCTGTTCTCTGGAGAAAAATAAAATGGAAATTGTACTT

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FIGURE 2593

CCTTCTCCCCGGCGGTTAGTGCTGAGAGTGGGAGTGTGTGCTCCGGGCTCGGAACACACATTTATTATTAAAAA
ATCCAAAAAAATCTAAAAAAATCTTTAAAAAACCCAAAAAAATTTACAAAAATCCGCGTCTCCCCCGCCGG
AGACTTTTATTTTTTTCTTCTCTTTTATAAAATAACCCGGTGAAGCAGCCGAGACCGACCCGCCCGCCCGCGG
CCCCGCAGCAGCTCCAAGAAGGAACCAAGAGACCGAGGCCTTCCCGCTGCCCGGACCCGACACCGCCACCCTCGC
TCCCCGCCGGCAGCCGGCAGCCAGCGGCAGTGGATCGACCCCGTTCTGCGGCCGTTGAGTAGTTTTCAATTCGG
TTGATTTTTGTCCCTCTGCGCTTGCTCCCCGCTCCCTCCCCCGGCTCCGGCCCCCAGCCCCGGCACTCGCTCT
CCTCCTCTCACGAAAGGTGCGGCCTGTGCCCTGCGGGCAGCCGTGCCGAGATGAACCCAGTGCCCCAGCTA
CCCCATGGCCTCGCTCTACGTGGGGGACCTCCACCCCGACGTGACCGAGGCGATGCTCTACGAGAAGTTCAGCCC
GGCCGGGCCATCCTCTCCATCCGGGTCTGCAGGGACATGATCACCCGCCGCTCCTTGGGCTACGCGTATGTGAA
CTTCAGCAGCCGGCGGACGCGGAGCGTGCTTTGGACACCATGAATTTTGATGTTATAAAGGGCAAGCCAGTACG
CATCATGTGGTCTCAGCGTGATCCATCACTTCGCAAAAGTGAGTAGGCAACATATTCAATAAAAAATCTGGACAA
ATCCATTGATAATAAAGCACTGTATGATACATTTTCTGCTTTTGGTAACATCCTTTTCATGTAAGGTGGTTTTGTGA
TGAAATGGTTCCAAGGGCTACGGATTTGTACACTTTGAGACGCAGGAAGCAGCTGAAAGAGCTATTGAAAAAAT
GAATGGAATGCTCCTAAATGATCGCAAAAGTATTTGTTGGACGATTTAAGTCTCGTAAAGAACGAGAAGCTGAAC
TGGAGCTAGGGCAAAAGAATTACCAATGTTTACATCAAGAATTTTGGAGAAGACATGGATGATGAGCGCCTTAA
GGATCTCTTTGGGCCTGCCTTAAGTGTGAAAGTAATGACTGATGAAAGTGGAAAAATCCAAAGGATTTGGATTTGT
AAGCTTTGAAAGGCATGAAGATGCACAGAAAGCTGTGGATGAGATGAACGGAAAGGAGCTCAATGGAAAAACAAAT
TTATGTTGGTCGAGCTCAGAAAAAGGTGGAACGGCAGACGGAACTTAAGCGCAAAATTTGAACAGATGAAACAAGA
TAGGATCACCAGATACCAGGGTGTTAATCTTTATGTGAAAAATCTTGATGATGGTATTGATGATGAACGTCTCCG
GAAAGAGTTTTCTCATTGTTGTTACAACTAGTGCAAAAGGTTATGATGGAGGGTGGTCGCAGCAAGGGTTTGG
TTTTGTATGTTTCTCTCCCCAGAAAGCCACTAAAGCAGTTACAGAAATGAACGGTAGAATTGTGGCCACAAA
GCCATTGTATGTAGCTTTAGCTCAGCGCAAAAGAGCGCCAGGCTCACCTCACTAACAGTATATGCAGAGAAT
GGCAAGTGACGAGCTGTTCCCAACCCTGTAATCAACCCCTACCAGCCAGCACCTCCTTCAGGTTACTTCATGGC
AGCTATCCCACAGACTCAGAACCCTGCTGCATACTATCCTCCTAGCCAAGTTGCTCAACTAAGACCAAGTCCTCG
CTGGACTGCTCAGGGTGCCAGACCTCATCCATTCCAAAATATGCCCGGTGCTATCCGCCCAGCTGCTCCTAGACC
ACCATTTAGTACTATGAGACCAGCTTCTTCACAGGTTCCACGAGTCATGTCAACACAGCGTGTTGCTAACACATC
AACACAGACAATGGGTCCACGTCTGCAGCTGCAGCCGCTGCAGCTACTCCTGCTGTCCGCACCGTTCCACAGTA
TAAATATGCTGCAGGAGTTCGCAATCCTCAGCAACATCTTAATGCACAGCCACAAGTTACAATGCAACAGCCTGC
TGTTTCATGTACAAGGTCAGGAACCTTTGACTGCTTCCATGTTGGCATCTGCCCCCTCCTCAAGAGCAAAAGCAAAT
GTTGGGTGAACGGCTGTTTCTCTTATTCAAGCCATGCACCCTACTCTTGCTGGTAAATCACTGGCATGTTGTT
GGAGATTGATAATTCAGAACTTCTTCATATGCTCGAGTCTCCAGAGTCACTCCGTTCTAAGGTTGATGAAGCTGT
AGCTGTACTACAAGCCACCAAGCTAAAGAGGCTGCCAGAAAGCAGTTAACAGTGCCACCGGTGTTCCAACTGT
TTAAATTTGATCAGGGACCATGAAAAGAACTTGTGCTTCACCGAAGAAAAATATCTAAACATCGAAAAACCTTAA
ATATTATGGAAAAAAACATTGCAAAATATAAAATAAATAAAAAAAGGAAAGGAAACTTTGAACCTTATGTACCG
AGCAAATGCCAGTCTAGCAAACATAATGCTAGTCTTAGATTACTTATTGATTTAAAAACAAAAAACACAAAAA
ATAGTAAATATAAAAAACAAATTAATGTTTTATAGACCTGGGAAAAAGAATTTTCAGCAAAGTACAAAAATTTA
AAGCATTCCTTTCTTTAATTTTGTAACTCTTACTGTGGAATAGCTCAGAATGTCAGTTCTGTTTTAAGTAACAG
AATTGATAACTGAGCAAGGAAACGTAATTTGGATTATAAAATCTTGCTTTAATAAAAAATTCCTTAAACAGTG

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FIGURE 2594

MNPSAPSYPMASLYVGD LHPDVTEAMLYEKFSPAGF ILSIRVCRDMITRRSLGYAYVNFQQPADAERALDTMNF D
VIKGGKPV RIMWSQRDP SLRKSGVGNIFIKNLDKSIDNKALYDTFSAFGNILSCKVVCDENGSKGYGFVHFETQEA
AERAIEKMNGMLLNDRKVFVGRFKSRKEREAE LGARAKEFTNVYIKNFGEDMDDERLKD LFGPALSVKVM TDESG
KSKGFGFVS FERHEDAQKAVDEMNGKELNGKQIYVGRAQKKVERQ TELKRKFEQMKQDRITRYQGVNLYVKNLDD
GIDDERLRKEFS PFGTITSAKVMEGGRSKGFGFVCFSSPEEATKAVTEMNGRIVATKPLYVALAQRKEERQAHL
TNQYMQRMASVRAPNPVINPYQPAPPSGYFMAAIPQTQNRAAYYPPSQVAQLRPSRWTAQGARPHPFQNMPGA
IRPAAPRPPFSTMRPASSQVPRVMSTQRVANTSTQTMGPRPAAAAAATPAVRTVPQYKYAAGVRNPQQHLNAQP
QVTMQQPAVHVQGQEPLTASMLASAPPQEQKQMLGERLFPLIQAMHPTLAGKITGM LLEIDNSEL LHMLESPESL
RSKVDEAVAVLQAHQAKEAAQKAVNSATGVPTV

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FIGURE 2595

GCCATTGCCTTGAGTGAGTGTGCCGCTCTCCAGCCCGTTTGAACGCTCCCCGCAGCCACCGCCACCCATTGGAAT
GGCCAACAGGGGACCTGCATTATGGCCTGAGCCAGGAGGTGCAGCAGAAGATTGAGAAACAGTATGATGCAGATC
TGGAGCAGATCCTGATCCAGTGGATCACCACCCAGTGCCGAAAGGATGTGGGCCGGTCCCAGCCTGGACGCGAGA
ACTTCCAGAACTGGCTCAAGGATGGCACGGTGTTATGTGAGCTCATTAAATGCACTGTACCCCAAGGGGCAGGTCC
CAGTAAAGAAGATCCAGGCCTCCACCATGGCCTTCAAGCAGATGGAGAAGATCTCTCAGTTCCTGCAAGCAGCTG
AGCGCTATGGCATTAAACACCACTGACATCTTCCAAACTGTGGACCTCTGGGAAGGAAAGAACATGGCCTGTGTGC
AGCGGACGCTGAGGAATCTGGGTGGGTGGCAGTAGCCTGGGATGATGGGCTCTTCTCTGGGGATCCCAACTGGT
TCCCTAAGAAATCCAAGGAGAATCCTCGGAACCTTCTCGGATAACCAAGCTGCAAGAGGGCAAGAACGTGATCGGGC
TACAGATGGGGGGCATCTCAGGCAGGCATGACTGGCTACTGGATGCCACACCAGATCCTTTGATCCCACCCAGG
CCTTGCCCCTGCCCTCCCACGAGTGGTTAATATACATGTAGATATATATTTTAGCAGTGACATTCCCAGAGAGCC
CCAGAGCTCTTAAGCTCCCTTCTGTGAGGGTGAGGGGTTGAGCCTGTCTATCACCTCTGAGGTGCCTGTTGGCA
GCCTCTCCCCCGTGCTTACTAATACATTCCCCTCCCCATACCCATCAAACTGGACCAACTGGCCTCTTCTTTTC
CCCTGGGATCAAAATTTAGGGGCCTCAGTCCCTCACCGCCATGCCCTGGCCTGTTCTGTCTCTCTCTTTTCCCCC
TGGCCTGTTCTGTCTCTGAGCTCTGTGCCCTCCGTTCAATCCATGGCTGGGAGTCAGTGATGCTGCCTCTGCCTT
CTGATGCTGGACTGGCCTTGCTTCTACAAGTATGCTTCTCCACAGCTGTGGCTGCAGGAACCTTAATTTATAGGG
AGGAGCCTGTGGCAGCTGCTGCCCCAGCCACAGCTGCACTGACTGTGCTCACCACACATCTGGGGCAGCCTTCCC
TGGCAGAGGCCCTCATGGCTTCTCATTTTCCATTCCCTTCACTGTGGCTAAGGGGTGGGGTGAGGGGACGGAGAG
GGAGGGCTGCCTACCATGGTCTGGGGCTTGAGGAAGATGAGTTTGTCTGATTAAAGAATTTGTCAATTT

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FIGURE 2596

GGACTCCCTTTTCTTTGGCAAGATCGCGGAGTACGACTTGACTACTCGCATCGCGCACTTTTGGATCGGCATCT
AGTCTTTCGCTTCTTGAATTTCTCTCTGTAAAGGAGATATATAATGAAAAGGAATTATTACAAGGTAAATTGGA
CCTTCTTAGTGATACCAACATGGTAGACTTTGCTATGGATGTATACAAAAACCTTTATTCTGATGATATTCCTCA
TGCTTTGAGAGAGAAAAGAACCACAGTGGTTGCACAACTGAAACAGCTTCAGGCAGAAACAGAACCAATTGTGAA
GATGTTTGAAGATCCAGAACTACAAGGCAATGCAGTCAACCAGGGATGGTAGGATGCTCTTTGACTACCTGGC
GGACAAGCATGGTTTTAGGCAGGAATATTTAGATACACTCTACAGATATGCAAAATTCAGTACGAATGTGGGAA
TTACTCAGGAGCAGCAGAATATCTTTATTTTTTTTAGAGTGTGGTTCCAGCAACAGATAGAAATGCTTTAAGTTC
ACTCTGGGGAAAGCTGGCCTCTGAAATCTTAATGCAGAATTGGGATGCAGCCATGGAAGACCTTACACGGTTAAA
AGAGACCATAGATAATAATTCTGTGAGTTCTCCACTTCAGTCTCTTCAGCAGAGAACATGGCTCATTCACTGGTC
TCTGTTTGTCTTCTTAATCACCCTAAAGGTCGCGATAATATTATTGACCTCTTCCTTTATCAGCCACAATATCT
TAATGCAATTCAGACAATGTGTCCACACATTCTTCGCTATTTGACTACAGCAGTCATAACAAACAAGGATGTTTCG
AAAACGTCGGCAGGTTCTAAAAGATCTAGTTAAAGTTATTCAACAGGAGTCTTACACATATAAAGACCCAATTAC
AGAATTTGTTGAATGTTTATATGTTAACTTTGACTTTGATGGGGCTCAGAAAAAGCTGAGGGAATGTGAATCAGT
GCTTGTGAATGACTTCTTCTTGGTGGCTTGTCTTGAGGATTTTATTGAAAAATGCCGTCTCTTCATATTTGAGAC
TTTCTGTCGCATCCACCAGTGTATCAGCATTAAACATGTTGGCAGATAAATTGAACATGACTCCAGAAGAAGCTGA
AAGGTGGATTGTAAATTTGATTAGAAATGCAAGACTGGATGCCAAGATTGATTCTAAATTAGGTCAATGTGGTTAT
GGGTAAACAATGCAGTCTCACCCTATCAGCAAGTGATTGAAAAGACCAAAAGCCTTTCCTTTAGAAGCCAGATGTT
GGCCATGAATATTGAGAAGAACTTAATCAGAATAGCAGGTGAGAGGCTCCTAACTGGGCAACTCAAGATTCTGG
CTTCTACTGAAGAACCATAAAGAAAAGATGAAAAAAAACCTATCAAAGAAAGATGAAATAATAAAACTATTATA
TAAAGGGTGACTTACATTTTGGAAACAACATATTACGTATAAATTTGAAGAATTGGAATAAAATTGATTCATTT
TAAAAAAA

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FIGURE 2597

MAEYDLTTRIAHFLDRHLVFPLLEFLSVKEIYNEKELLQGKLDLLSDTNMVDVFAMDVYKNLYSDDIPHALREKRT
TVVAQLKQLQAETEPIVKMFEDPETTRQMQSTRDGRMLFDYLADKHGFRQEYLDTLYRYAKFQYECGNYSGAAEY
LYFFRVLPATDRNALSSLWGKLASEILMQNWDAAEMDLTRLKETIDNNSVSSPLQSLQORTWLIHWSLFVFFNH
PKGRDNIIDFLYQPQYLNAIQTMCPHILRYLTAVITNKDVRKRRQVLKDLVKVIQQESYTYKDPITEFVECLY
VNFDGGAQKKLRECESVLVNDFFLVACLEDFIENARLFIFETFCRIHQCSINMLADKLNMTPEEAERWIVNLI
RNARLDAKIDSKLGHVVMGNNAVSPYQQVIEKTKSLSFRSQMLAMNIEKKLNQNSRSEAPNWTQDSGFY

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[illegible]

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FIGURE 2599

MASRKEGTGSTATSSSSTAGAAGKGKGKGGSGDSAVKQVQIDGLVVLKIIKHYYEEGQGTEVVQGVLLGLVVEDR
LEITNCFFFPQHTEDDADFDEVQYQMEMMRSLRHVNIDHLHVGWYQSTYYGSFVTRALLDSQFSYQHAIEESVVL
IYDPIKTAQGSLSLKAYRLTPKLMEVCCEKDF SPEALKKANITFEYMFEEVP IVIKNSHLINVL MWELEKKS AVA
DKHELLSLASSNHLGKNLQLLMDRVDEMSQDIVKYNTYMRNTSKQQQKHQYQQRQENMQRQSRGEPPLPEED
LSKLFKPPQPPARMDSLIAGQINTYCNIKEFTAQNLGKLFMAQALQEYNN

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FIGURE 2600A

AGTGAATCGGAAAGGAGGCGCCGGCTGTGGCGGCGGGAGCTGCTCGGAAGCTACACCTCGCAAGGGCTCCCC
CCTTTCCCCACCCCTCCCCGACCCTTTTCCCTCCCGGGCCACCCAGCCCCGCCAACTCCCAGCGGAGAGCA
AGGTTTTCTTCTGTTTTCATAGCCAGCCAGAACAATGTTCTACGCACATTTTGTCTCAGTAAAAGAGGGCCTCT
GGCCAAAATTTGGCTAGCGGCCCATTTGGGATAAGAAGCTAACCAAAGCCCATGTGTTTCAGTGTAATTTAGAGAG
CAGCGTGGAGAGTATCATCTCACCAAAGGTGAAAATGGCATTACGGACATCAGGACATCTCTTACTGGGAGTAGT
TCGAATCTATCACAGGAAAGCCAAATACCTTCTTGCAGACTGTAATGAAGCATTCAATTAAGATAAAGATGGCTTT
TCGGCCAGGTGTGGTTGACCTGCCTGAGGAAAATCGGGAAGCAGCTTATAATGCCATTACTTTACCTGAAGAATT
TCATGACTTTTGATCAGCCACTGCCTGACTTAGATGACATCGATGTGGCCAGCAGTTCAGCTTGAATCAGAGTAG
AGTGGAAGAGATAACCATGAGAGAAGAAGTTGGGAACATCAGTATTTACAAGAAAATGATTTTGGTGATTTTGG
AATGGATGATCGTGAGATAATGAGAGAAGGCAGTGCTTTTGAGGATGACGACATGTTAGTAAGCACTACTACTTC
TAACCTCCTATTAGAGTCTGAACAGAGCACCAGCAATCTGAATGAGAAAATTAACCATTTAGAATATGAAGATCA
ATATAAGGATGATAATTTTGGAGAAGGAAATGATGGTGGAAATATTAGATGACAACTTATTAGTAATAATGATGG
CGGTATCTTTGATGATCCCCCTGCCCTCTCTGAGGCAGGGGTGATGTTGCCAGAGCAGCCTGCACATGACGATAT
GGATGAGGATGATAATGTATCAATGGGTGGGCCTGATAGTCTGATTGAGTGGATCCCGTTGAACCAATGCCAAC
CATGACTGATCAAACAACACTTGTTCCAAATGAGGAAGAAGCATTGTCATTGGAGCCTATTGATATAACTGTTAA
AGAAACAAAAGCCAAGAGGAAGAGGAAGCTAATTGTTGACAGTGTCAAAGAGTTGGATAGCAAGACAATTAGAGC
CCAACCTTAGTGATTATTCAGATATTGTTACTACTTTGGATCTGGCACCGCCACCAAGAAATTGATGATGTGGAA
AGAGACAGGAGGAGTAGAAAACTGTTTTCTTTACCTGCTCAGCCTTTGTGGAATAACAGACTACTGAAGCTCTT
TACACGCTGTCTTACACCGCTTGTACCAGAAGACCTTAGAAAAAGGAGGAAAAGGAGGAGAGGCAGATAATTTGGA
TGAATTCCTCAAAGAATTTGAAAATCCAGAGGTTCTTAGAGAGGACCAGCAACAGCAGCATCAGCAGCGTGATGT
TATCGATGAGCCCATTTATTGAAGAGCCAAGCCGCTCCAGGAGTCAGTGATGGAGGCCAGCAGAACAAACATAGA
TGAGTCAGCTATGCCTCCACCACCCTCAGGGAGTTAAGCGAAAAGCTGGACAAATTGACCCAGAGCCTGTGAT
GCCTCCTCAGCAGGTAGAGCAGATGGAAATACCACCTGTAGAGCTTCCCCCAGAAGAACCTCCAAATATCTGTCA
GCTAATACCAGAGTTAGAACTTCTGCCAGAAAAGAGAAGGAGAAAAGAGAAGGAAAAAGAGATGATGAAGAGGA
AGAGGATGAAGATGCATCAGGGGGCGATCAAGATCAGGAAGAAAGAGATGGAAACAAAAGGACTCAGCAGATGCT
TCATGGTCTTCAGCGTGCTCTTGCTAAACTGGAGCTGAATCTATCAGTTTGCTTGAGTTATGTGCAAAATACGAA
CAGAAAACAAGCTGCCGCAAAGTTCTACAGCTTCTTGGTTCTTAAAAAGCAGCAAGCTATTGAGCTGACACAGGA
AGAACCGTACAGTGACATCATCGCAACACCTGGACCAAGGTTCCATATTATATAAGGAGCTAGAAGCATTATAGC
TAGTGTTTGATTCACTAGTGCTTACAAATTGCCCCCATGTGTAGGGGACACAGAACCCTTTGAGAAAACCTTAGAT
TTTTGTCGTACAAAGTCTTTGCCCTTTTCTTCTTCAATTTTTTCCAGTACATTAAATTTGTCAATTTTCATCTT
TGAGGGAACCTGATTAGATGGGTTGTGTTTGTGTTCTGATGGAGAAAACAGCACCCCAAGGACTCAGAAGATGAT
TTAACAGTTTCAAGACAGATGTGTGCAATATTGGTGCATGTAATAATGTTGAGTGGCAGTCAAAAGTCATGATTT
TTATCTTAGTTCTTCACTGCAATTGAAAAGGAAAACCTGTCTGAGAAAATGCCTGACAGTTTAAATTTAAACT
ATGGTGTAAGTCTTTGACAAGAAAAAAAACAAACAAACACTTCTTTCCATCAGTAACACTGGCAATCTTCTGT
TAACCACTCTCCTTAGGGATGGTATCTGAAACAACATGGTCACCCCTCTTGAGATTCGTTTTAAGTGTAATTCCA
TAATGAGCAGAGGTGTACGCGAAATTGTGTTATGACTGATAGCCTTCAGCTACAAAAGATAGGACTGACCTGGT
TTAAAGTGTTCTATTTTGTAAATCATTCCATTGAGTCTTCTGATGAACCTGGCTATACTGAAATCTGTTATTT
TAGTGAGGCTCCAAAATGAGCAAAGCTAGGCCTGATTAGAGTAGAGTGACTATTAAAAACATAACTTTCTAGGA
GCTATAAATCAAAGTTTTAAAAAGATGTTTGGATATATTTGAGTATTCCGATCATGAAACAGAAATGGCCCTGC
CTACTACAAGGACAGACTGATGGGAAATTATGCACCTGGTCAACTTAGCTTTTAAGCAGACGATGCTGTAAAAAC
TAACGGCTTCTCTGATATTTATTGTAAGTTTTAGTACTGATCTCCTTTTCCAGTGCTGCACACTCCTGGTTTGGGA
ACTTTAATAGCGTTGCAACGAAATCCTATATCCAGTTTCTGTGAATTTAATTGAAGAAAAATACATCCAAATAAA
GACTTTATTATTAAACAGACCAGATAGCATCAGAAATCATGTGACTGTTATGATTATCAGAATATGTCTTAACTTT
TTAGGGCAAAAGTTAAACACTGAAAGTTCTAGCTTAAGTGTTGAAACTTTTGTGGGAAAAAAAATCACTTTTGA
CTCAGACTTCAGTGATATACCAATAATTTAAATTTATGTGAAATGTTTTAAATTTGTGAACCTCGTAATTACTGTT
TTAATGATTTCAGTTTCTTCAGAGTGGTAATTGTATAAAATTTGCTATTGCAGCTTTATATTCAATATGATGTGCCT
GTAACCAAGGAGTTTTTCCCGTTTGTAAAAAGACATTGTAGATAATTGAATGTTTGAATTTTAGAAAGGTCATTA
GTTTCTTGTTACACATTTTGTAGTCTGGTTTTTGTGCTTATCGGGTTTAAATATTGTTCTTGAAAATAGTTGAT

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FIGURE 2600B

GCTATGTTATGTATAACTTTTCTAATAAAAGTTGTGTTATAAGCTGT

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FIGURE 2601

MFYAHFVLSKRGPLAKIWLAHWDKKLTKAHVFEKNLESSVESII SPKVKMA LR TSGHLLLGVVRIYHRKAKYLL
ADCNEAFIKIKMAFRPGVVDLP EENREAAYNAILP EEFHDFDQPLPD LDDIDVAQQFSLNQSRVEEITMREEVG
NISILQENDFGDFGMDDREIMREGSAFEDDDMLVSTTTSNLLLESEQSTSNLNEKINHLEYEDQYKDDNFGEGND
GGILDDKLI SNNDGGIFDDPPALSEAGVMLPEQPAHDDMD EDDNVSMGGPDS PDSVDPVEPMPMTMTDQTTLVPNE
EEAFAL EPI DITVKETKAKRRKRLIVDSVKELDSKTIRAQLSDYSDIVTTLDLAPPTKKLMMWKETGGVEKLFSL
PAQPLWNNRLLKLFTRCLTPLVPEDLRKRRKGGEADNLDEF LKEFENPEVPREDQQQQHQQRDVIDEPIIEEPSR
LQESVMEASRTNIDESAMPPPPPPQGVKRKAGQIDPEFVMP PPQVEQMEIPPVELPPEEPPNICQLIPELELLPEK
EKEKEKEKEDDEEEDEDEDASGGDQDQEERRWNKRTQQMLHGLQRALAKTGAESISLLELCRNTNRKQAAKFYSF
LVLKKQQAIELTQEEPYSDI IATPGPRFHII

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FIGURE 2602

GGCGGCGGCGGCAGGAGCCCCGGGAGGCGGAGGCGGGAGGCGGCGGCGGCGGCGGAGACGCAGCAGCGGCAGCGG
CAGC**ATG**TCGGCCGGCGGGAGCGTCAGTCCCGCCGCCCGCGAACCCGCGGTGTCTTCCCGCCGCCCGGGTCAC
CCTGCCCGCCGGCCCCGACATCCTGCGGACCTACTCGGGCGCCTTCGTCTGCCTGGAGATTCTGTTTCGGGGGTCT
TGTCTGGATTTTGGTTGCCCTCCTCCAATGTTCTCTACCTCTACTACAAGGATGGGTCATGTTTGTGTCCGTGAC
AGCGTTTTTCTTTTCGCTCCTCTTTCTGGGCATGTTCTCTCTGGCATGGTGGCTCAAATTGATGCTAACTGGAA
CTTCCTGGATTTTGCCTACCATTTTACAGTATTGTCTTCTATTTTGGAGCCTTTTTATTGGAAGCAGCAGCCAC
ATCCCTGCATGATTTGCATTGCAATACAACCATAACCGGGCAGCCACTCCTGAGTGATAACCAGTATAACATAAA
CGTAGCAGCCTCAATTTTTGCCTTTATGACGACAGCTTGTTATGGTTGCAGTTTGGGTCTGGCTTTACGAAGATG
GCGACCG**TAA**CACTCCTTAGAAACTGGCAGTCGTATGTTAGTTTCACTTGTCTACTTTATATGTCTGATCAATTT
GGATACCATTTTGTCCAGATGCAAAAACATTCCAAAAGTAATGTGTTTAGTAGAGAGAGACTCTAAGCTCAAGTT
CTGGTTTATTTTCATGGATGGAATGTTAATTTTATTATGATATTAAAGAAATGGCCTTTTATTTTACATCTCTCCC
CTTTTTCCCTTTCCCGCTTTATTTTCTCCTTTTCTTTCTGAAAGTTTCCCTTTTATGTCCATAAAATACAAATAT
ATTGTTTCATAAAAAATTAGTATCCCTTTTGTGTTGGTTGCTGAGTCACCTGAACCTTAATTTTAATTGGTAATTAC
AGCCCCATAAAAAAACACATTTCAAATAGGCTTCCCACTAAACTCTATATTTTAGTGTAACCAGGAATTGGCAC
ACTTTTTTTAGAAATGGGCCAGATGGTAAATATTTATGCTTCACGGTCCATACAGTCTCTGTGCACAACTATTTCAGT
TCTGCTAGTATAGCGTGAAAGCAGCTATACACAATACAGAAATGAATGAGTGTGGTTATGTTCTAATAAAACTTA
TTTATAAAAACAAGGGGAGGCTGGGTTTAGCCTGTGGGCCATAGTTTGTCAACCACTGGTGTAACCTTAGTTA
TATATGATCTGCATTTTCTTGAACCTGATCATTGAAAACCTTATAAACCTAACAGAAAAGCCACATAATATTTAGTG
TCATTATGCAATAATCACATTGCCCTTTGTGTTAATAGTCAAATACTTACCTTTGGAGAATACTTACCTTTGGAGG
AATGTATAAAATTTCTCAGGCAGAGTCCTGGATATAGGAAAAAGTAATTTATGAAGTAAACTTCAGTTGCTTAAT
CAAACATAATGATAGTCTAACAACTGAGCAAGATCCTCATCTGAGAGTGCTTAAATGGGATCCCCAGAGACCATT
AACCAATACTGGAACGGTATCTAGCTACTGATGTCTTACTTTGAGTTTATTTATGCTTCAGAATACAGTTGTTT
GCCCTGTGCATGAATATACCCATATTTGTGTGTGGATATGTGAAGCTTTTCCAAATAGAGCTCTCAGAAGAATTA
AGTTTTTACTTCTAATTATTTTGCATTACTTTGAGTTAAATTTGAATAGAGTATTAAATATAAAGTTGTAGATTC
TTATGTGTTTTTGTATTAGCCAGACATCTGTAATGTTTTTGCAGTGGTGACAGACAAAATCTGTTTTAAATCA
TATCCAGCACAAAACTATTTCTGGCTGAATAGCACAGAAAAGTATTTTAACCTACCTGTAGAGATCCTCGTCAT
GGAAAGGTGCCAAACTGTTTTGAATGGAAGGACAAGTAAGAGTGAGGCCACAGTTCCACCACACGAGGGCTTTT
GTATTGTTCTACTTTTTCAGCCCTTTACTTTCTGGCTGAAGCATCCCCTTGGAGTGCCATGTATAAGTTGGGCTA
TTAGAGTTCATGGAACATAGAACAACCATGAATGAGTGGCATGATCCGTGCTTAATGATCAAGTGTTACTTATCT
AATAATCCTCTAGAAAAGAACCCTGTTAGATCTTGGTTTGTGATAAAAAATATAAAGACAGAAGACATGAGGAAAA
CAAAAGGTTTGGAGAAATCAGGCATATGACTTTATACTTAACATCAGATCTTTTCTATAATATCCTACTACTTTG
GTTTTCCTAGCTCCATACCACACACCTAAACCTGTATTATGAATTACATATTACAAAGTCATAAATGTGCCATAT
GGATATACAGTACATTCTAGTTGGAATCGTTTACTCTGCTAGAATTTAGGTGTGAGATTTTTGTTTCCAGGTA
TAGCAGGCTTATGTTTGGTGGCATTAAATTGGTTTCTTTAAATGCTTTGGTGGCACTTTTGTAAACAGATTGCT
TCTAGATTGTTACAAACCAAGCCTAAGACACATCTGTGAATACTTAGATTGTTAGCTTAATCACATTCTAGACTT
GTGAGTTGAATGACAAAGCAGTTGAACAAAATTTAGGCATTTAAGAATTTAACATGTCTTAGCTGTAAAAATGA
GAAAGTGTGGTTGGTTTTAAATCTGGTAACCTCCATGATGAAAAGAAATTTATTTTATACGTGTTATGTCTCTA
ATAAAGTATTCATTTGATAAAAAAAAAAAAAA

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FIGURE 2603

MSAGGASVPPPPNPAVSFPPPRVTLPAGPDILRTYSGAFVCLEILFGGLVWILVASSNVPLPLLQGWVMFVSVTA
FFFSLLFLGMFLSGMVAQIDANWNFLDFAYHFTVFVFYFGAFLLEAAATSLHDLHCNTTITGQPLLSDNQYNINV
AASIFAFMTTACYGCSLGLALRRWRP

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FIGURE 2604

GGCGCGCTTTCAAACGCTCAGGTTTCTACCTTCCGGCTGCTTGGGAACCTCTTTCTTGCCCGCCAAGCCCGCAG
CCACCCGGGCGCGCGGGGACTCCTAGACCCGGCGCTGCGATGAAGAGGACCCGCGACGAGGTGGATGCGACGCTG
CAGATCGCCAAGCTGAATGCGGCCGAGCTGCTGCCGGCGGTGCACTGCCTGGGCTTCGGCCCTGGGGCCAGCGGC
GCTGCAGCCGGCGACTTCTGCCTGCTGGAGCTGGAGCCCACGCTGTGCCAGCAGCTGGAGGATGGACACAGTCTT
GTGATTTCGTGGTGATAAAGACGAGCAAGCTGTGCTGTGCAGTAAAGACAAAACATACGACTTGAAGATAGCAGAC
ACTTCCAATATGTTGCTTTTCATTCTGGTTGTAAACTCCGGACCAGTTGAAGAAGGAAGATTACACTGTAAC
ATTATTACACTGAGATCTTTGGTTTTTCTAATAATTATTGGGAATTAAGAAGACGTAGACCCAAGTTAAAGAAG
CTAAAGAAACTTTTGATGGAAAATCCATATGAAGGACCTGACAGTCAAAAAGAGAAGGATTCAAATAGCTCAAAA
TATACAACTGAAGATTTGCTTGATCAAATTCAGGCAAGTGAGGAAGAAATAATGACCCAATTACAAGTTCTAAAT
GCCTGTAAGATTGGAGGTTATTGGAGGATTCTTGAATTTGATTATGAGATGAACTTCTGAATCATGTAACCTCAG
CTTGTTGATTCTGAATCATGGTCTTTTGGTAAAGTTCCTTTGAACACATGCCTTCAGGAACCTCGGACCATTGGAG
CCAGAGGAAATGATAGAACACTGTCTTAAATGTTATGGGAAGAAATATGTAGATGAAGXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXAGCAGCAGCACGAATGCTACTTCAGAATGCGGTGAAATTCAATCTCGCTGAG
TTTCAAGAAAGTGTGGCAGCAGAGTGTCTCTGAAGGAATGGTAACTAGTCTTGATCAGCTTAAGGGTTTAGCGCTG
GTGGATAGACACTCGAGACCAGAAATCATATTTTTGCTGAAAGTAGATGATTTACCTGAGGATAATCAGGAACGT
TTTAATAGCCTTTTCTCTCTAAGGGAGAAGTGGACAGAAGAAGATATTGCTCCATATATTCAAGATTTGTGTGGA
GAGAAGCAAACCATAGGTGCATTACTACTAAATATTCTCATTCTTCGATGCAAAATGGTGTTAAAGTTTATAAT
TCGAGAAGACCCATTTCTTAAAAGAACAACGGTCTTTTCTTCAGGACTCAAGTTGCTTTATAAAGTTGCTGGATA
GAAGAAAAATAACTTGTAATTTTATTCTGACTTTTAGAAACCTAGTCTTCTAAGGCATTTTCTCCTCATCTTA
AGCATTTTGAACTACTGTTATTTCTTAAATGTTATAGGATGTAGCTTTAAATTTATATTTGTACTATGTACACA
GTGTAAACAAGGACAAAAGAATTCTTCTCTATATTATGTCTGAGGTCTCTATGATTTATTTAAAGTTTGGCTTTT
TATATTTAAATGTCATTTCTTTACTTAGGATTTGATGTTCTAATCATTAAATACACTTAAGTTTTCAGAGAACT
AAATAGTAATAGTTTCATAGAAGAGAACTATTTATCACTTAAATATCATTTCTCAAGTGAGTGAGTTCCCCTCT
ACTTTTAGCCTTCCACCCAACTGGAAGCCTCTAGGTGCTATCAATTATTTATATCCATCGTTTACATCCATGAA
ATTGGCTGAATAATTACTCCTCTGCCTGGCGTAGACATGCGCTTTGGGAAAAAACGAGTTTATAATCCTATAAT
GAAGAATACTGGCACAGGCAATGCTCACTCGAAAACCTCAAGTAATTTCTAGTTGGTTTTGGAATGCTTGATAAA
GTTCTTTTACAGCTTTATTTTCTGATTTGTTTTGGTTTTAGATCAAAGTTCAAATTAATTTTAACTTAGCTAATG
AACTCATCACCAGGACAGTTGGAGGGGGTAGGCCGAGGTTAAATGGTCCACGTTTCAAAAATGTTAATGGCTAAT
CCATAATTAAGAAGGTTTAACTGTTACTGAAGTTTACAAGTTTTATTGTCATGAACATGAATACAAACACGAT
GGCTTCGAAATGTCTTTCAATAAAATGTTTCTGCATTT

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FIGURE 2605

ACGCCCTATACAACCTTGGCTTCACATACTTTTACACTAACTTTATATGATTTTTAAAACTGGTCTGATCGGACT
TCTCGTCCTGGGACACTGTTTACTGGAGTCTGGCCGGCTCTCCGTGCTCCTCTTGGTACCTCATTTTGGGGAGAA
CCTTAAACCCACTCGAGCAGATAATCTCCGCCTTGACCGGTGCCACCAAAGAAGCCTTGGAAACCATGTGGACTTT
TCTGGGCATTGCCACTTTCACCTATTTTTATAAGAAGTTCGGGGACTTCATCACTTTGGCCAACAGGGAGGTCCT
GTTGTGCGTGCTGGTGTTCCTCTCGCTGGGCCTGGTGCTCTCCTACCGCTGTGCCACCGAAACGGGGGTCTCCT
CGGGCGCCAGCAGAGCGGCTCCCAGTTCGCCCTCTTCTCGGATATTCTCTCAGGCCTGCCTTTTCATTGGCTTCTT
CTGGGGCCAAATCCCCCCTGAATCAGAAAATAAGGAGCAGCTCGAGGCCAGGAGGCGCAGAAAAGGAACCAATAT
TTCAGAAAACAAGCTTAATAGGAACAGCTGCCTGTACATCAACATCTTCTCAGAATGACCCAGAAGTTATCATCGT
GGGAGCTGGCGTGCTTGGCTCTGCTTTGGCAGCTGTGCTTTCCAGAGATGGAAGAAAGGTGACAGTCATTGAGAG
AGACTTAAAAGAGCCTGACAGAATAGTTGGAGAATTCTGTCAGCCGGGTGGTTATCATGTTCTCAAAGACCTTGG
TCTTGGAGATACAGTGAAGGTCTTGATGCCCAGGTTGTAAATGGTTACATGATTTCATGATCAGGAAAGCAAATC
AGAGGTTTCAAGATTCTTACCCTCTGTCAGAAAACAATCAAGTGCAGAGTGAAGAGCTTTCCATCACGGAAGATT
CATCATGAGTCTCCGAAAGCAGCTATGGCAGAGCCCCAATGCAAAGTTTATTGAAGGTGTTGTGTACAGTTATT
AGAGGAAGATGATGTTGTGATGGGGAGTTCAGTACAAGGATAAAGAGACTGGAGATATCAAGGAACCTCCATGCTC
CACTGACTGTTGTGTCAGATGGGCTTTTCTCCAAGTTCAGGAAAAGCCTGGTCTCCAATAAAGTTTCTGTATCAT
CTCATTTTGTGGCTTTCTTATGAAGAATGCACCACAGTTTAAAGCAAATCATGCTGAACCTATTTTAGCTAACCC
CGAGTCCAGTTCTCATCTACCAGATTTTCATCCAGTGAAACTCGAGTACTTGTGACATTAGAGGAGAAATGCCAA
GGAATTTAAGAGAATACATGGTTGAAAAAATTTACCCACAAATACCTGATCACCTGAAAGAACCATTCTTAGAAG
CCACTGACAATTCTCATCTGAGGTCCATGCCAGCAAGCTTCCCTTCCCTTCATCAGTGAAGAAACGAGGTGTTT
TTCTTTTGGGAGACGCATATAATATGAGGCATCCACTTACTGGTGGAGGAATGACTGTTGCTTTTAAAGATATAA
AACTATGGAGAAAACCTGCTAAAGGGTATCCCTGACCTTTATGATGATGCAGCTATTTTCGAGGCCAAAAATCAT
TTTACTGGGCAAGAAAAACATCTCATTCCCTTTGTGCTGAATATCCTTGTCTCAGGCTCTTTATGAATTATTTCTG
CCACAGATGATTCCCTGCATCAACTAAGAAAAAGCCTGTTTTCTTTATTTCAAACCTGGTGGCGAATGTGTTGCGG
GTCCTGTTGGGCTGCTTTCTGTATTGTCTCCTAACCTCTAGTTTTAATTGGACACTTCTTTGCTGTTGCAATCT
ATGCCGTGATTTTTTGCTTTAAGTCAGAACCTTGGATTACAAAACCTCGAGCCCTTCTCAGTAGTGGTGCTGTAT
TGTACAAAGCGTGTTCTGTAATATTTCTCTAATTTACTCAGAAATGAAGTATATGGTTCATTAAAGCTTAAAGG
GAACCATTTGTGAATGAATATTTGGAACTTACCAAGTCCTAAGAGACTTTTGGAGAGGATATATATAGCATAGT
ACCATACCACTTATAAAGTGGAACTCTTGGACCAAGATTTGGATTAATTTGTTTTTGAAGTTTTTGTATATAA
ATATGTAAATACATGCTTTAATTTGCAATTTAAATGAAGGGGTAAATAAGTTAGACATTTAAAGAAATGATT
GTTACCATAAATTAGTGCTAATGCTGAGGAGAACTACAGTTTTTCTTTTGAATTTAGTATTTGAGATGAGTTGTT
GGGACATGCAATAAAATGAAGAATGA

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FIGURE 2606

GGCAGAGCCCCGCTCAGTCACCCGCAGCAGGCGTGCAAGTTTCCCGGCTCTCCGCGCGGCCGGGGAAGGTCAGCGC
CGTAAATGGCGTTCTTGGCGTCGGGACCCTACCTGACCCATCAGCAAAAGGTGTTGCGGCTTTATAAGCGGGCGCT
ACGCCACCTCGAGTCGTGGTGCGTCCAGAGAGACAAATACCGATACTTTGCTTGTTTGATGAGAGCCCGGTTTGA
AGAACATAAGAATGAAAAGGATATGGCGAAGGCCACCCAGCTGCTGAAGGAGGCCGAGGAAGAATTCTGGTACCG
TCAGCATCCACAGCCATACATCTTCCCTGACTCTCCTGGGGGCACCTCCTATGAGAGATACGATTGCTACAAGGT
CCCAGAATGGTGCTTAGATGACTGGCATCCTTCTGAGAAGGCAATGTATCCTGATTACTTTGCCAAGAGAGAACA
GTGGAAGAAACTGCGGAGGGGAAAGCTGGGAACGAGAGGTTAAGCAGCTGCAGGAGGAAACGCCACCTGGTGGTCC
TTTAACTGAAGCTTTGCCCCCTGCCCGAAAGGAAGGTGATTTGCCCCCACTGTGGTGGTATATTGTGACCAGACC
CCGGGAGCGGCCCATGTAGAAAGAGAGAGACCTCATCTTTCATGCTTGCAAGTGAAATATGTTACAGAACATGCA
CTTGCCCTAATAAAAAATCAGTGAAATGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2607

MAFLASGPYLTHQQKVLRLYKRALRHLESWCVQRDKYRYFACLMRARFEEHKNEKDMAKATQLLKEAEEEFWYRQ
HPQPYIFPDSPGGTSYERYDCYKVPFEWCLDDWHPSEKAMYPDYFAKREQWKKLRRESWEREVKQLQEETPPGGPL
TEALPPARKEGDLPLWWYIVTRPRERPM

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FIGURE 2608

CTGCTCGCGGCCGCCACCGCCGGGCCCCGGCCGTCCTGGCTCCCCTCCTGCCTCGAGAAGGGCAGGGCTTCTCA
GAGGCTTGCGGGGAAAAAGAACGGAGGGAGGGATCGCGCTGAGTATAAAAGCCGGTTTTTCGGGGCTTTATCTAAC
TCGCTGTAGTAATTCCAGCGAGAGGCAGAGGGAGCGAGCGGGCGGCCGGCTAGGGTGGAAGAGCCGGGCGAGCAG
AGCTGCGCTGCGGGCGTCCGGAAGGGAGATCCGGAGCGAATAGGGGGCTTCGCCTCTGGCCCAGCCCTCCCGC
TGATCCCCCAGCCAGCGGTCCGCAACCCTTGCCGCATCCACGAACTTTGCCATAGCAGCGGGCGGGCACTTTG
CACTGGAACCTTACAACACCCGAGCAAGGACGCGACTCTCCGACGCGGGGAGGCTATTCTGCCCATTTGGGGACA
CTTCCCCGCCGCTGCCAGGACCCGCTTCTCTGAAAGGCTCTCCTTGACGCTGCTTAGACGCTGGATTTTTTTCGG
GTAGTGGAACACAGCAGCCTCCCGCGACGATGCCCTCAACGTTAGCTTACCAACAGGAACCTATGACCTCGAC
TACGACTCGGTGCAGCCGTATTTCTACTGCGACGAGGAGGAGAACTTCTACCAGCAGCAGCAGCAGAGCGAGCTG
CAGCCCCCGCGCGCCAGCGAGGATATCTGGAAGAAATTCGAGCTGCTGCCACCCCGCCCTGTCCCCTAGCCGC
CGCTCCGGGCTCTGCTCGCCCTCCTACGTTGCGGTACACCCCTTCTCCCTTCGGGGAGACAACGACGGCGGTGGC
GGGAGCTTCTCCACGGCCGACCAGCTGGAGATGGTGACCGAGCTGCTGGGAGGAGACATGGTGAACAGAGTTTC
ATCTGCGACCCGGACGACGAGACCTTCATCAAAACATCATCATCCAGGACTGTATGTGGAGCGGCTTCTCGGCC
GCCGCCAAGCTCGTCTCAGAGAAGCTGGCCTCCTACCAGGCTGCGCGCAAAGACAGCGGCAGCCCCGAACCCGCC
CGCGGCCACAGCGTCTGCTCCACCTCCAGCTTGTACCTGCAGGATCTGAGCGCCGCCGCTCAGAGTGCATCGAC
CCCTCGGTGGTCTTCCCCTACCCTCTCAACGACAGCAGCTCGCCCAAGTCTGCGCCTCGCAAGACTCCAGCGCC
TTCTCTCCGTCTCGGATTCTCTGCTCTCCTCGACGGAGTCTCCCCGAGGGCAGCCCCGAGCCCTGGTGCTC
CATGAGGAGACACCGCCCACCACGAGCAGCTCTGAGGAGGAACAAGAAGATGAGGAAGAAATCGATGTTGTT
TCTGTGGAAGAGGAGGCTCCTGGCAAAGGTGAGAGTCTGGATCACCTTCTGCTGGAGGCCACAGCAAACCT
CCTCACAGCCCACTGGTCTCTAAGAGGTGCCACGTCTCCACACATCAGCACAACTACGCAGCGCCTCCCTCCACT
CGGAAGGACTATCCTGCTGCCAAGAGGGTCAAGTTGGACAGTGTGAGAGTCTGAGACAGATCAGCAACAACCGA
AAATGCACCAGCCCCAGGTCTCGGACACCGAGGAGAATGTCAAGAGGCGAACACACAACGTCTTGAGCGGCCAG
AGGAGGAACGAGCTAAACCGGAGCTTTTTTGCCCTGCGTGACCAGATCCCGGAGTTGGAAAAACAATGAAAAGGCC
CCCAAGGTAGTTATCCTTAAAAAGCCACAGCATACATCCTGTCCGTCCAAGCAGAGGAGCAAAAGCTCATTCT
GAAGAGGACTTGTGCGGAAACGACGAGAACAGTTGAAACACAACTTGAACAGCTACGGAACTCTTGTGCGTAA
GGAAAAGTAAGGAAAACGATTCTTCTAACAGAAATGTCTGAGCAATCACCTATGAACTTGTTCAAATGCATG
ATCAAATGCAACCTCACAACCTTGCTGAGTCTTGAGACTGAAAGATTTAGCCATAATGTAACTGCCTCAAATT
GGACTTTGGGCATAAAAGAACTTTTTTATGCTTACCATCTTTTTTTTTCTTTAACAGATTTGTATTTAAGAATT
GTTTTTAAAAATTTTAA

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FIGURE 2609

GGTAATTCATTTGCACACCTGTTAGCAAGAAACAGAAGTTGAAGGACTGGAACAAGTGAAGTGAAGGAAAGAGGGAA
CGCCAATCCAAGGATAGAAGGACAAGGACAGAATCACCAGCACTGGCTGAAGGTACCTTAACATGGGGAATCTTC
TTAAAGTTTTGACATGCACAGACCTTGAGCAGGGGCCAAATTTTTCTTGATTTTGAAAATGCCAGCCTACAG
AGTCTGAGAAGGAAATTTATAATCAGGTGAATGTAGTATTAAAAGATGCAGAAGGCATCTTGAGGAGCTTGCAGT
CATAAGAGGAGCTGGCCACGAAATACGAGAGGCAATCCAGCATCCAGCAGATGAGAAGTTGCAAGAGAAGGCAT
GGGGTGAGTTGTTCCACTAGTAGGCAAATTAAGAAATTTTACGAATTTTCTCAGAGGTTAGAAGCAGCATTAA
GAGGTCTTCTGGGAGCCTTAACAAGTACCCCATATTCTCCACCCAGCATCTAGAGCGAGAGCAGGCTCTTGCTA
AACAGTTTGAGAAATCTTCATTTACACTCCGGTTTGATGAAGTCAAGATGACAAATCTGCCATACAGAATG
ATTTAGCTATTATAGAAGAACATTGAGTCGTATGAGGATTAACAATGTACCGGCAGAAGGAGAAAATGAAGTAA
ATAATGAATTGGCAAATCGAATGTCTTTGTTTTATGCTGAGGCAACTCCAATGCTGAAAACCTTGAGTGATGCCA
CAACAAAATTTGTATCAGAGAATAAAAATTTACCAATAGAAAATACCACAGATTGTTTAAGCACAAATGGCTAGTG
TATGCAGAGTCATGCTGGAAACACCGGAATACAGAAGCAGATTTACAAATGAAGAGACAGTGTCATTCTGCTTGA
GGGTAATGGTGGGTGTCATAATACTCTATGACCACGTACATCCAGTGGGAGCATTGCTAAAACCTTCCAAAATTG
ATATGAAAGGTTGTATCAAAGTTCTTAAGGACCAACCTCCTAATAGTGTGGAAGGTCTTCTAAATGCTCTCAGGT
ACACAACAAAACATTTGAATGATGAGACTACCTCCAAGCAAATTAATCCATGCTGCAATTAACAATCTGGAATA
AGCACCTGCTGTAGACAGAAGACAGTATTCTGCAATGACTGAGAATGCAGTTTTTTAGTGATTGCAATTACTATC
TCATTTATTCTTGCTTTTTATTTCTTTCTCTGTTCTCTTCCCTCTTTTTTAATCATGTTCTTAAGACTTCTTTT
CTGTGCCAAAATCAGTAAAGTTACACTCTGAAGGGATATCATCCTTTCAAACGGGCCATCTAAGGCAGCTAATTA
TGCATTGCATTGGGGTCTCTACTGAGAAAAATCTGTGACTTGAAGTAAATATTTTTAAATGTGGATTTTTTTTG
AACTAATATTTAATATTGCTTCTCCTGCATGGCAAACCTGCCTATTCTGCTATTTAAAAACCTCAATGACTTT
ATTTTCTACTGCCGCCTTTTTTCATGTGCAACCAAAATGAAAATGTTTAAATTAAGTGTGTGTACAAATGGTACC
CAACACAACTTTTTTTAAATTAGTAATACTTTTGTAAAGTTTAAAGTTTGATTTTGACTTTTTTTGTAAGG
ATGTATGTTGTGTGTTAACCTTTATTAATAACGTTAAAGCTGTGATGTGTGCGTAGAATATTACGTATGCAT
GTTTCATGTCTAAAGAATGGCTGTTGATGATAAAATAAAATCAGCTTTCATTTTTCT

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FIGURE 2610

MGNLLKVLCTDLEQGPNNFFLDFENAQPTSESEKEIYNQVNVVLKDAEGILEDLSYRGAGHEIREAIQHPADEKL
QEKAWGAVVPLVGKLKKFYEFSSQRLEAALRGLLGALTSTPYSPTQHLEREQALAKQFAEILHFTLRFDCLKMTNP
AIQNDFSYYRRTLSRMRINNVPÆGENEVNNELANRMSLFYAEATPMLKTLSDATTKFVSENKNLPIENTTDCLS
TMASVCRVMLETPEYRSRFTNEETVSFCLRVMGVILYDHVHPVGAFAKTSKIDMKGCIKVLKDQPPNSVEGLL
NALRYTTKHLNDETTSKQIKSMLQ

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FIGURE 2611

CTAATTTCTAGATTAGACGTTGGTAGGGAGGCCGATAAGTCAAAGTGGCAAGTGTGTCAGTGTACACCAAAGGGA
GCGACCAGAACAGAGTAAAGCCCATAAACCAGTAAAAACAAACAACACCACAGTCCCTCAAAGCTGTAGGCCAC
GTAGTATGAGGGAAACAGCACCACCGCTGGGGCAGTGTGTGCATCAGAAGAGCATTAGGAAGAGGTCCGTATCTTG
CAGTTTATGTTGAAGTTTCTGGTAAAGATGGTCAGAAGCGGGAACCTGACACTTCAAAGTGGAAGCTTCAGTTAC
CTGGGCGCCCAAGGGGAGGTGTTCTCCCCAGTGATGCCGGGCAAATGAACCAACAGCTGGATCATACTTCTCATT
TGACATGCTTTTTGGGGGACCTACGTGGGGTTTCAGCACTGCGCCGGGCCACAGATTTGCAGGGCCAATGAGGATG
TGGTCCCTGCCCCGAGCCTGATGCTCTAAGTGCTGAGGGTGGAGGGCTTCCCGGAGGAGGTGTTCTCTGAGGAG
AGTGCAATGTGGCTGGGTGTGAGCTCTGAGCACAGAAGTCACTTGGGGATCATAGCAGTTTGTGTTGTGAGGGACA
GTGTG

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FIGURE 2612

GCTCCGGGCCAGCCGCGGTCCAGAGCGCGGAGGTTTCGGGGAGCTCGGCCAGGCTGCTGGTACCTGCGTCCGCCC
GGCGAGCAGGACAGGCTGCTTTGGTTTGTGACCTCCAGGCAGGACGGCCATCCTCTCCAGAATGAAGATCTTCTT
GCCAGTGCTGCTGGCTGCCCTTCTGGGTGTGGAGCGAGCCAGCTCGCTGATGTGCTTCTCCTGCTTGAACCAGAA
GAGCAATCTGTACTGCCTGAAGCCGACCATCTGCTCCGACCAGGACAACACTACTGCGTGACTGTGTCTGCTAGTGC
CGGCATTGGGAATCTCGTGACATTTGGCCACAGCCTGAGCAAGACCTGTTCCCCGGCCTGCCCCATCCCAGAAGG
CGTCAATGTTGGTGTGGCTTCCATGGGCATCAGCTGCTGCCAGAGCTTTCTGTGCAATTTTCAGTGCGGCCGATGG
CGGGCTGCGGGCAAGCGTCACCCCTGCTGGGTGCCGGGCTGCTGCTGAGCCTGCTGCCGGCCCTGCTGCGGTTTGG
CCCCTGACCGCCCAGACCCTGTCCCCGATCCCCCAGCTCAGGAAGGAAAGCCCAGCCCTTTCTGGATCCCACAG
TGTATGGGAGCCCCTGACTCCTCACGTGCCTGATCTGTGCCCTTGGTCCCAGGTCAGGCCCACCCCTGCACCTC
CACCTGCCCCAGCCCCTGCCTCTGCCCAAGTGGGGCCAGCTGCCCTCACTTCTGGGGTGGATGATGTGACCTTC
CTTGGGGGACCGCGGAAGGGACGAGGGTTCCCTGGAGTCTTACGGTCCAACATCAGGACCAAGTCCCATGGACAT
GCTGACAGGGTCCCCAGGGAGACCGTGTGAGTAGGGATGTGTGCTGGCTGTGTACGTGGGTGTGCAGTGCACGT
GAGAGCACGTGGCGGCTTCTGGGGGCCATGTTTGGGGAGGGAGGTGTGCCAGCAGCCTGGAGAGCCTCAGTCCCT
GTAGCCCCCTGCCCTGGCACAGCTGCATGCACTTCAAGGGCAGCCTTTGGGGGTTGGGGTTTCTGCCACTTCCGG
GTCTAGGCCCTGCCCCAAATCCAGCCAGTCTGCCCCAGCCCACCCCCACATTGGAGCCCTCCTGCTGCTTTGGT
GCCTCAAATAAATACAGATGTCCCC

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FIGURE 2613

TGTTGAGAGGCTGGCCTGCGGTGATGTGGCCAAAGAGGAAGAGCTGGGCTGGGGTGAGTGTTGGTCACATGGTTG
AAACTAGGTGGGGAGGGGAGTGTTCCAGGGGAGAGTCCAGGCCAGCTCTGCTGGGACTTGCCATGGGGGTACG
ACTCATCTGCAGGGAAGGTCTGGGCTTTATCTCTGAGCACCTCTGTGTGCTGCTCACCCTGAAGTGGGGGTGGGC
CTGTGCCTGGCCTGTCCCCATCCTGGGAGCTCCCAATGCCATCTGCAAGGCTGTGGACCCCTCAGGAGTGGC
CTGGAGCCTGGCTCCCATTGCCACATGGTGGCTGTGTGTGTGGAGAGGGTTGATAGTGGAGTGGTCAGGCCCAGG
CTGCCCTGGGGGATGAAGTGCCATCCTCTGGGTGCCCTGGAGAAAGAAGAGAACTCAGTGAGCCCTGTCTGGTAC
TTTCTGGAGGAGGGCTCCCATGCTGGCCCTCCACCCCTCTGTCCCTGTACCCTGAGGCCTCTGGATTTCTCTC
TCTGCCCTTCCCAACCTGCCAACTTCACGGGTTTCTGGCTGGGTTCTGGGGATGGCCCTAGGGGAGACGGGCCA
GGCACAAGCGGGGCTGTGTCAAGGTGGGTATGCAGGGGTAGCACAAGTGTGCAGAGCCTGGGGAGGCATGGGCAA
AGCATGGCAGGCGGGCGGGGAGGGGATCTTGGAAGGTACGGGCTGGGGAGCAGTGTGGGCAGCGGCCAGAGGT
GGGAAGGCCGTAGCTTAGCTGGGTGTCCCCTTTCTGTCTCTGCAGGTGGAGCCCCCTGAGCTGCCGCTGATCT
GCAGCACTGGATCTCCTACAACGAGGCCAGCAGCCAGCTGCTCCGCTAGGAGTGGGCTCAGTGATGTACCAA
GGACCAGTGACCGCCACCTTCACACCGTCTGCCCTGGCCACCATCCTGGGCCTGGGGGCTGCCACAGATGGGCA
GTCTCAGCCATACTCTGTTCCAGCTGGAGTAGCCTCCTGACCAGCCTGGCCACCCTGCTCCACCCACTGGGCC
CCCCAGTTATTGATACCCCTCTGTGCTGGGCTCCACGCTAGGCAGAGGAGGAGTGGCATTGGCATCCTGACCCA
GCTCTGCCCTCAAGGTGGGGATGGATGGGCAAAGGAGAGTCTGCCTGGCCCTACGATGAGGCCACTCATGTGGG
CCTAGGTAGGGGAGGATGGTGCTGGAGCAGAGGGACCCACAAGTGCCTCCCGAGCCTAGATCCTGGCTCGGACC
ACTGCAAGGGCCGAGGCAGGGCCAGACCAGAGCATCCTGGGTACAGGCCTGGGCTCTCCAGGGCCTGGGCCTGAT
TCAGGTGCAGTGGGCACTCCTGAAGGGTCAGAGCGGCATCTGCCAGGCAGCCCTCTGGCTTCCGCTGAGGTGGT
TGCAGGCCTGGGGCAGAGCCTGGGTGGTCAGAGGCCGGGGCTAGAGGCAGATGGAAGGGAGGCATTTGCTGACAG
AGGACGGGGCACCCGGGCTCCCCACTGCAGTCGGCCTTGCTCCTCCTCCTCTACCTCCAGTCAGGCTGGAC
GGGAGGGTAGCCTTGTGGCTGAGAGGGGTGAGTGGTGGCACAGGGGCTCCTGGAAAGACAGCAGGCTTCCTG
CTGGGCGTTCCCTTGTGGAGGGAATAGAGTGGGGGTGGGACTCTGCAGGGGTGTCCTTGTCCACTCGCACCCCT
CGCCGCCCACCAGGGCCATGCTCTGTGACTTGGGCTGATCCCCACCCCTTCTGGGCCTACAGCACCAACAGGCCG
TGTACCCCTTAGAGCTGCCCCTCTCTGGCCTGGCCGGCAGGCGTCTTCTTAACCTCCTTTGTCTCTATATTAG
CATGTTCCCTTGTGAGCTGCTGGGCCGGCCCTGCCTTGCCTAGCAGAGCCTCTCCTGGCAGCTTCTCAGGTCTCC
CTAATGGAGACACCAGCCTGAGGCTCCAGCTGATGCCCTCAGCTCCCAGAGAGGGGGTGCCCCATCTAGCTGGGT
GCAGGGGTCACTGCTTGTGAGCTCAGGGCCCTGTGCCCGCTTGCTGTTCCTTACATCTGTGCTGCACATCCA
GAAC TGCTCCTTGCCGCTGCCTCCAGGAAGCCACCTTGAGCCAGAGTCAAGGGCTGCAGCACTGCCCGATAGA
ACACGCCCCGCTCACTGCTGTTCTTGCCCTACAGCCACCATGGGAAAGCTGCAACCTTTCTGTTTTATTAAAG
AAAGCCCAACATTAAAGGGTTTTTCATTGC

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FIGURE 2614

GGGCACCGTAACCAGCGCCGCGGACACCGGCACCGGCGCCACGGACTCCGCAGGACCCCGCGCCCGCCGCCGCG
CTATGCTGGGGCTGCTGGTGGCGTTGCTGGCCCTGGGGCTCGCTGTCTTTGCGCTGCTGGACGTCTGGTACCTGG
TGCGCCCTCCGTGCGCCGTGCTGCGCGCGCGCTGCTGCAGCCGCGCGTCCGTGACCTGCTAGCTGAGCAGCGCT
TCCCGGGCCGCGTGCTGCCCTCGGACTTGACCTGCTGTTGCACATGAACAACGCGCGCTACCTGCGCGAGGCCG
ACTTTGCGCGCGTCGCGCACCTGACCCGCTGCGGGGTGCTCGGGGCGCTGAGGGAGTTGCGGGCGCACACGGTGC
TGGCGGCCTCGTGCGCGCGCCACCGCCGCTCGCTGCGCCTGCTGGAGCCCTTCGAGGTGCGCACCCGCTGCTGG
GCTGGGACGACCGCGCTTCTACCTGGAGGCGCGCTTTGTGAGCCTGCGGGACGGTTTCGTGTGCGCGCTGCTGC
GCTTCCGGCAGCACCTGCTGGGCACCTCACCCGAGCGCGTCTGTCAGCACCTGTGCCAGCGCAGGGTGGAGCCCC
CTGAGCTGCCCCGTGATCTGCAGCACTGGATCTCTACAACGAGGCCAGCAGCCAGCTGCTCCGCATGGAGAGTG
GGCTCAGTGATGTACCAAGGACCAGTGACCGCCACCTTCACACCGTCTGCCCTGGCCACCATCTGGGCCCTGGG
GGCTGCCACAGATGGGCAGTCTCAGCCATACTCTGTTCCAGCTGGAGTAGCCTCCTGACCAGCCTGGCCCCACC
TGCTCCACCCACTGGGCCCCCCCCAGTTATTGATACCCCCTCTGTGCTGGGCTCCACGCTAGGCAGAAGGAGGAGTG
GCATTGGCATCTGACCCAGCTCTGCCCTCAAGGTGGGGATGGATGGGCAAAGGAGAGTCTGCTGGCCCTACG
ATGAGGCCACTCATGTGGGCCTAGGTAGGGGAGGATGGTGCCTGGAGCAGAGGGACCCACAAGTGCCTCCCGAGC
CTAGATCCTGGCTCGGACCACTGCAAGGGCCGAGGCAGGGCCAGACCAGAGCATCCTGGGTACAGGCCTGGGCTC
TCCAGGGCCTGGGCTGATTGAGGTGCACTGGGCACTCCTGAAGGGTCAGAGCGGCATCTGCCAGGCAGCCCCCTC
TGGCTTCCGCTGAGGTGGTTGCAGGCCTGGGGCAGAGCCTGGGTGGTCAGAGGCCGGGGCTAGAGGCAGATGGAA
GGGAGGCATTTGCTGACAGAGGACGGGGCACCCGGGCTCCCCACTGCAGTCGGCCTTGCCCTCCTCCTCCTCT
ACCTCCAGTCAGGCTGGACGGGAGGGTAGCCTTGTGGCTGAGAGGGGTGAGACTAGGTGGCACAGGGGCTCCTGG
AAAGACAGCAGGCTTCCTGCTGGGCGTTCCCTTGTTGGAGGGAATAGAGTGGGGGTGGGACTCTGCAGGGGTGTC
CTTGTCCTACTCGCACCCCTCGCCGCCCACAGGGCCATGCTCTGTGACTTGGGCTGATCCCCACCCTTTCTGGGC
CTACAGCACCAAGGCCGCTGTACCCCCCTTAGAGCTGCCCCCTCTCTGGCCTGGCCGGCAGGCGTCTTCTTAATC
CTCTGTCTCTATATTGAGCATGTTCCCTTGTCAGCTGCTGGGCCGGCCCTGCCTTGCGCTAGCAGAGCCTCTCCT
GGCAGCTTCTCAGGTCTCCCTAATGGAGACACCAGGCTACTAGGACACTGGCTGGGGCCACCCCTCCTGCCTAA
TGCTTACCTTACAGCTGGGGAACTGAGGCCTGGAATGGCCAGAGTCACCAAGGCAAAGTTGGGGCTGGTCCC
AGCCTGAGGCTCCAGCTGATGCCCTCAGCTCCCAGAGAGGGGGTGCCCCATCTAGCTGGGTGCAGGGGTCACTGC
TTGTGAGCTCAGGGCCCTGTGCCCCGCTTGCCCTGTTCCCTACATCTGTGCCTGCACATCCAGAAGTGCCTCCTTG
CCGCTGCCTCCAGGAAGCCACCTTGAGCCAGAGTCAAGGGCTGCAGCACTGCCCGATAGAACACGCCCGCCCTC
ACTGCTGTTCTTGCTTACAGCCACCATGGGAAAGCTGCAACCTTTCTGTTTTATTAAAGAAAGCCCAACATTA
AAGGGTTTTCAATTGCAAAAAAAAAAAAAAAAAA

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FIGURE 2615

MLGLLVALLALGLAVFALLDVWYLVRLPCAVLRARLLQPRVRDLLAEQRFPGRVLP
SDLDLLLHMNNARYLREAD
FARVAHLTRCGVLGALRELRAHTVLAASCARHRRSLRLLEPFVTRLLGWDDRAFYLEARFVSLRDGFVCALLR
FRQHLLGTSPERVVQHLCQRRVEPPELPADLQHWISYNEASSQLLRMESGLSDVTKDQ

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FIGURE 2616

CTTTCCCGGAGGCTGGCAGATGCGCGTGGTGCGGCTGCTGCGGCTCCGGGCGGCTCTGACGCTGCTCGGGGAGGT
CCCCCGCCGCGGCTCCCGGGGTGTCCCGGGCTCGCGCAGGACGCAGAAGGGCAGTGGAGCCAGGTGGGAGAA
GGAGAAGCACGAAGACGGGGTGAAGTGGAGACAGCTGGAGCACAAGGGCCGTACTTCGCACCCCCATACGAGCC
CCTTCCCGACGGAGTGCCTTTCTTCTATGAAGGAAGGCCCTGTGAGATTGAGCGTGGCAGCGAGGAGGTGCGCAC
TTTTTATGGGAGGATGTTAGATCATGAATACACAACAAAGGAGGTTTTCCGGAAGAACTTCTTCAATGACTGGCG
AAAGGAAATGGCGGTGGAAGAGAGGGAAAGTCATCAAGAGCCTGGACAAGTGTGACTTCACGGAGATCCACAGATA
CTTTGTGGACAAGGCCGAGCCCGGAAAGTCTTGAGCAGGGAGGAGAAGCAGAAGCTAAAAGAGAGGCAGAAAA
ACTTCAGCAAGAGTTCGGCTACTGTATTTTAGATGGTCACCAAGAAAAAATAGGCAACTTCAAGATTGAGCCGCC
TGGCTTGTTCCGTGGCGGTGGCGACCATCCCAAGATGGGGATGCTGAAGAGAAGGATCACGCCAGAGGATGTGGT
TATCAACTGCAGCAGGGACTCGAAGATCCCCGAGCCGCCGGCGGGGCACCAAGTGAAGAGGAGTGGCGTCCGATAA
CACCGTCACGTGGCTGGCAGCTTGGACCGAGAGCGTTTCAAGTCCATCAAGTACATCATGCTGAACCCCTTGCTC
GAAGCTGAAGGGGGAGACAGCTTGGCAGAAGTTTGAAACAGCTCGACGCCTGCGGGGATTTGTGGACGAGATCCG
CTCCAGTACCGGGCTGACTGGAAGTCTCGGGAAATGAAGACGAGACAGCGGGCGGTGGCCCTGTATTTTCATCGA
TAAGCTGGCACTGAGAGCAGGAAATGAGAAGGAGGACGGTGAGGCGGCCGACACCGTGGGCTGCTGTTCCCTCCG
CGTGGAGCACGTCCAGCTGCACCCGGAGGCCGATGGCTGCCAACACGTGGTGGAATTTGACTTCCTGGGGAAGGA
CTGCATCCGCTACTACAACAGAGTGCCGGTGGAGAAGCCGGTGTACAAGAACTTACAGCTCTTTATGGAGAACAA
GGACCCCGGGACGACCTCTTCGACAGGCTGACCACGACCAGCCTGAACAAGCACCTCCAGGAGCTGATGGACGG
GCTGACGGCCAAGGTGTTCCGGACCTACAACGCCTCCATCACTCTGCAGGAGCAGCTGCGGGCCCTGACGCGCGC
CGAGGACAGCATAGCAGCTAAGATCTTATCCTACAACCGAGCCAACCGAGTCGTGGCCATTCTCTGCAACCATCA
GCGAGCAACCCCAAGTACGTTGAGAAGTCGATGCAGAATCTCCAGACGAAGATCCAGGCAAAGAAGGAGCAGGT
GGCTGAGGCCAGGGCAGAGCTGAGGAGGGCGAGGGCTGAGCACAAAGCCCAAGGGGATGGCAAGTCCAGGAGTGT
CCTGGAGAAGAAGAGCGGCTCCTGGAGAAGCTGCAGGAGCAGCTGGCGCAGCTGAGTGTGCAGGCCACGGACAA
GGAGGAGAACAAAGCAGGTGGCCCTGGGCACGTCCAAGCTCAACTACCTGGACCCAGGATCAGCATTGCCTGGTG
CAAGCGGTTGAGGTGCCAGTGGAGAAGATCTACAGCAAAACACAGCGGGAGAGGTTTCGCCTGGGCTCTCGCCAT
GGCAGGAGAAGACTTTGAATTCTAAACGACGAGCCGTGTTGAAACTTCTTTTGTATGTGTGTGTGTTTTTTTCACT
ATTAAAGCAGTACTGGGGAATTTTGTACAATAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2617

MRVVRLRLRAALTLLGEVPRRPASRGVPGSRRTQKGS GARWEKEKHEDGVKWRQLEHKGPYFAPPYEPLPDGVR
FFYEGRPVRLSVA AEEVATFYGRMLDHEYTTKEVFRKNFFNDWRKEMAVEEREVIKSLDKCDFTEIHRYFVDKAA
ARKVLSREEKQKLKEEA EKLQQEFGYCILDGHQEKIGNFKIEPPGLFRGRGDHPKMGMLKRRITPEDVVINCSRD
SKIEPPAGHQWKEVRSDNTVTWLAAWTESVQNSIKYIMLNPCSKLKGETAWQKFETARRLRGFVDEIRSQYRAD
WKSREMKTQRAVALYFIDKLALRAGNEKEDGEAADTVGCCSLRVEHVQLHPEADGCQHVVVEFDL GKDCIRYYN
RVPVEKPVYKNLQLFMENKDPRDDLFDRLTTTSLNKHQLQELMDGLTAKVFRTYNASITLQEQLRALTRAEDSIAA
KILSYNRRANRVVAILCNHQRATPSTFEKSMQNLQTKIQAKKEQVAEARAELRRARA EHKAAQGDGKSRSVLEKKRR
LLEKLQEQLAQLSVQATDKEENKQVALGTSKLNLYLDPRI SIAWCKRFRVPVEKIYSKTQRRERFAWALAMAGEDFE
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FIGURE 2618

GATGGCGGCGGAGCAGGACCCCGAGGCGCGCGCGGGGCGGCCGCTGCTCACTGACCTCTACCAGGCCACCATGGC
GTGGGGCTATTGGCGCGCGGGCCGGGCGCGGGACGCCGCCGAGTTCGAGCTCTTCTTCCGCCGCTGCCCCTTCGG
CGGCGCCTTCGCCTTGCTAGCCGGCTTGCGCGACTGTGTGCGCTTCCTGCGCGCCTTCCGCCTGCGGGACGCCGA
CGTGCAGTTCCTGGCCTCGGTGCTGCCCCAGACACGGATCCTGCGTTCTTCGAGCACCTTCGGGGCCCTCGACTG
CTCCGAGGTGACGGTGCGAGCCCTGCCCCGAGGCTCCCTCGCCTTCCCCGAGTGCCGCTCCTGCAGGTGTCCGGG
CCGCTCCTGGTGGTGAGCTGCTGGAGACACCGCTGCTCTGCCTGGTCAGCTACGCCAGCCTGGTGGCCACCAAC
GCAGCGCGCGTTTCGCTTGATCGCAGGGCCAGAGAAGCGGCTGCTAGAGATGGGCCTGAGGCGGGCTCAGGGCCCG
ATGGGGCCTGACAGCCTCCACCTACAGCTACCTGGGCGGGCTTCGACAGCAGCAGCAACGTGCTAGCGGGCCAGCT
GCGAGGTGTGCCGGTGGCCGGGACCCTGGCCCACTCCTTCGTCACTTCCTTTTCAGGCAGCGAGGTGCCCCCTGA
CCCGATGTTGGCGCCAGCAGCTGGTGAGGGCCCTGGGGTGGACCTGGCGGCCAAAGCCCAGGTGTGGCTGGAGCA
GGTGTGTGCCACCTGGGGCTGGGGGTGCAGGAGCCGCATCCAGGCGAGCGGGCAGCCTTTGTGGCCTATGCCTT
GGCTTTTCCCCGGGCCTTCAGGGCCTCCTGGACACCTACAGCGTGTGGAGGAGTGGTCTCCCCAACTTCCTAGC
AGTCGCCCTGGCCCTGGGAGAGCTGGGCTACCGGGCAGTGGGCGTGAGGCTGGACAGTGGTGACCTGCTACAGCA
GGCTCAGGAGATCCGCAAGGTCTTCCGAGCTGCTGCAGCCCAGTTCAGGTGCCCTGGCTGGAGTCAGTCCTCAT
CGTAGTCAGCAACAACATTGACGAGGAGGCGCTGGCCCGACTGGCCCAGGAGGGCAGTGAGGTGAATGTCATTGG
CATTGGCACCAGTGTGGTCACCTGCCCCAACAGCCTTCCCTGGGTGGTGTCTATAAGCTGGTGGCCGTGGGGGG
CCAGCCACGAATGAAGCTGACCGAGGACCCCGAGAAGCAGACGTTGCCCTGGGAGCAAGGCTGCTTTCCGGCTCCT
GGGCTCTGACGGGTCTCCACTCATGGACATGCTGCAGTTAGCAGAAGAGCCAGTGCCACAGGCTGGGCAGGAGCT
GAGGGTGTGGCCTCCAGGGGCCAGGAGCCCTGCACCGTGAGGCCAGCCAGGTGGAGCCACTACTGCGGCTCTG
CCTCCAGCAGGGACAGCTGTGTGAGCCGCTCCCATCCCTGGCAGAGTCTAGAGCCTTGGCCCAGCTGTCCCTGAG
CCGACTCAGCCCTGAGCACAGGCGGCTGCGGAGCCCTGCACAGTACCAGGTGGTGTGTCGAGAGGCTGCAGGC
CCTGGTGAACAGTCTGTGTGCGGGGCAGTCCCCCTGAGACTCGGAGCGGGGCTGACTGGAAACAACACGAATCAC
TCACTTTTCCCC

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FIGURE 2619

CAGAAAAATGGCTACAACTTCCTAGCACATGAGAAGATCTGGTTCGACAAGTTCAAATATGACGACGCAGAAAAG
GAGATTCTACGAGCAGATGAACGGGCCTGTGGCAGGTGCCCTCCCGCCAGGAGAACGGCGCCCGTGATCCTCCGTG
ACATTGCGAGAGCCAGAGAGAACATCCAGAAATCCCTGGCTGGAAGCTCAGGCCCCGGGGCCTCCAGCGGCACCA
GCGGAGACCACGGTGAGCTCGTCGTCCGGATTGCCAGTCTGGAAGTGGAGAACCAGAGTCTGCGTGGCGTGTTAC
AGGAGCTGCAGCAGGCCATCTCCAAGCTGGAGGCCCGGCTGAACGTGCTGGAGAAGAGCTCGCCTGGCCACCGGG
CCACGGCCCCACAGACCCAGTGACAATGAGGAGGAGGACAAGGAGGCGGCACAGCTGCGGGAGGAGCGGCTACGG
CAGTACGCGGAGAAGAAGGCCAAGAAGCCTGCACTGGTGGCCAAGTCCTCCAATCCTGCTGGATGTCAAGCCTTGG
GATGATGAGACGGACATGGCCCAGCTGGAGGCCTGTGTGCGCTCTATCCAGCTGGACGGGCTGGTCTGGGGGGCT
TCCAAGCTGGTGCCCGTGGGCTACGGTATCCGGAAGCTACAGATTCAGTGTGTGGTGGAGGACGACAAGGTGGGG
ACAGACTTGCTGGAGGAGGAGATCACCAAGTTTGAGGAGCACGTGCAGAGTGTGATATCGCAGCTTTCACAAG
ATCTGAAGCCTGAGTGTGTGTACGTGCGCGCGTGCGTGAGGCCCTGCCACGATTAAAGACTGAGAC

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FIGURE 2620

AGCGCAGCGGCGTCCGAGGCAACAAGATGGCAGCTGCGGAGCCGTCTCCGCGGCGCGTGGGCTTCGTGGGCGCGG
GCCGCATGGCGGGGGCCATCGCGCAGGGCCTCATCAGAGCAGGAAAAGTGGAAGCTCAGCACATACTGGCCAGTG
CACCAACAGACAGGAACCTATGTCACTTTCAAGCTCTGGGTTGCCGACCACGCACTCCAACCAGGAGGTGCTAC
AGAGCTGCCTGCTCGTCATCTTTGCCACCAAGCCTCATGTGCTGCCAGCTGTCCTGGCAGAGGTGGCTCCTGTGG
TCACCACTGAACACATCTTGGTGTCCGTGGCTGCTGGGGTGTCTCTGAGCACCTGGAGGAGCTGCTGCCCCAA
ACACACGGGTGCTGCGGGTCTTGCCCAACCTGCCCTGTGTGGTCCAGGAAGGGGCCATAGTGATGGCGCGGGGCC
GCCACGTGGGGAGCAGCGAGACCAAGCTCCTGCAGCATCTGCTGGAGGCCTGTGGGCGGTGTGAGGAGGTGCCTG
AAGCCTACGTGACATCCACACTGGCCTCAGTGGCAGTGGCGTGGCCTTCGTGTGTGCATTCTCCGAGGCCCTGG
CTGAAGGAGCCGTCAAGATGGGCATGCCCAGCAGCCTGGCCACCGCATCGCTGCCCAGACCCTGCTGGGGACGG
CCAAGATGCTGCTGCACGAGGGCCAACACCCAGCCAGCTGCGCTCAGACGTGTGCACCCCGGGTGGCACCACCA
TCTATGGACTCCACGCCCTGGAGCAGGGCGGGCTGCGAGCAGCCACCATGAGCGCCGTGGAGGCTGCCACCTGCC
GGGCCAAGGAGCTCAGCAGAAAGTAGGCTGGGCTCTGGCCATCCTTTCTGCTCTGTGCCCTGCCTCTCCCTG
TGTCCCTTCCCTGAGGACTGCGGCTCCCTCCCTCCTGCATGAGGGTCTCCTACTGCTCCTTCTCCCTTGCACA
GGGAAATGCAGGGGGCAGGACTTGGGAGGTTCCAGCAGGCGGGGGAGCCCCGACCAGTGGGGACACTCCTCCCTC
CCCAGTGAGCAGAAGGCACCGTGGTGGTGGCTCTGCCCTTGCTGCAGTGAGCCACCTTGCTGCAACATTGGTT
CTGAGGGGCCCCAAGAGATGGCGTCTTGGTCATTTGCCCGCATGGTTGGGCAGTTGGTTGAGGCCATGAACAGAAC
TTACGGTAACAGGCACGGCTGGCCCCAATGCCTGGTCTGGAGCTGGAGCTTGCCTTTGGCTTTCCAGGTGGCTCCG
TGCAGCTACAGCCAGGCCGGCTGCCTCATCTCAGCTCTAGGGGGCAGCAGCCATATGGGGTCTGCACAAGAGACC
CTCTCCCTTGCAGTAAAGCCAGGGGGCCCTGGCCTGATGGGGCCCCCATGGGGAGCTGGAGCCTGCCCTGCAGCCT
GGAGAAGAGGGTGGCTGTGGTGGGCGTGCTCATCCCTGCTAAGGAGCAGGAGCTGCTGGGCCAGGTCTGCGGCA
GTGCTGGGGTGGCACCAGGTGGGCAGTGGTAGGTGGGGTGGCTTGAGGTCTGGGAGGGTGGCCCTGGCCAGCCAG
GACACATGCAGACCCCTGGCTTAGTCTGGATACAGGCTCCCTCTTTTCTCCCAATCCTAAGCTCCTGACAAGTGG
CCAGGTGGCTCTGGGCCCTCCTGCCCGTGCTAGGTGAGGGTCTGGAATACCCCGTAGCTCTGGCACCACCA
CACTGGCCTCTGATGGCAAGACTTGGCCCCCTCCACCTGTCCCTAACGGACGGCAGGTGAGGAAAGCCAGGACTCA
GGGGAGAAGCAAAACCCCAAGGATTGAAGGCTAGGGTTCTAGGGCCTTTGGGTGGGGAGGGCCCGGGCCGGACAGC
CTCAGCTCCGTCCCTTGCCCCACAAGATTACCTGGGCCTCCAGTCCACGCTGGCCCCAACTGCTGCAGCTCTC
GGCTTCCGCCCCAACAGCCTCTGGAGGTGAGGCGGGAGCATGCCCTCAGCGAGGCTGGGCGGGGGTCTGCTGTG
CCATCTCCCTGTGCGCCTGAGCAGATCAATCCACAGTGCAAAACAGGGCTAACGGCACCTGCAGGACAGCAGCA
CGCTCCATCCCTCATGCTCAGCTGCCTCTGCGGCCACGGACTTCTGCCCTTCATCTGCTCTCTTACTCTCCTG
AGCCTAGCCCGTCCGTAAAGCTCCCTCCCTGCCTGGTTCCCAGGGCAGGCTGACTCAGTTGACTGCTTGGTCCAA
GCCTGGCCCTGGCACTTGTCAGGGTCAGCCTAAGGAGATGGGAATAAAGAGGGCCAGAGAGCACCAAGTGAGCTCA
TGTTTC

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FIGURE 2621

MAAAEPSPRRVGFGVAGRMAGATAQGLIRAGKVEAQHILASAPTDRLCHFQALGCRTHSNQEVLSCLLVIFA
TKPHVLPVLAEVAPVVTTEHILVSVAAGVSLSTLEELLPPNTRVLRVLPNLPCVVQEGAIVMARGRHVGSSETK
LLQHLLEACGRCEEVPEAYVDIHTGLSGSGVAFVCAFSEALAEAVKMGMPSSLAHRIAAQTLLGTAKMLLHEGQ
HPAQLRSDVCTPGGTTIYGLHALEQGGLRAATMSAVEAATCRAKELSRK

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FIGURE 2622

CGCGTGGTGCGGCTGCTGCGGCTCCGGGCGGCTCTGACGTGCTCGGGGAGGTCCCCGCCGCCCGCCTCCCGGGAT
GTCCGCTCGCGCAGGACGCAGAAAGGCAGTGGAGCCAGAAACAGCCAGAAAGGCCCTTTCAGAAATGTCTGTTGC
ACATGCTTTCCTCTCAGACCCCTTCAGAGACTTCCTGTTGCTCTGAGGACACTCATCCAGCCGACCAGGCCAC
CAGGCCCCCAACAGCACTACCTGGCTGGGGTCACGTGCAGGTCTCCTGGCTCTGGCAGGTGGGAGAAGGAGAAGC
ACGAAGACGGGGTGAAGTGGAGACAGCTGGAGCACAAGGGCCCGTACTTCGCACCCCCATACGAGCCCTTCCCG
ATGGAGTGCCTTCTTCTATGAAGGAAGGCCTGTGAGATTGAGCGTGGCAGCGGAGGAGGTGCGCACTTTTTATG
GGAGGATGTTAGATCATGAATACACAACAAAGGAGGTTTTCCGGAAGAACTTCTTCAATGACTGGCGAAAGG

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FIGURE 2624

MEEKEILRRQIRLLQGLIDDYKTLHGNAFAPGTPAASGWQPPTYHSGRAFSARYPRPSRRGYSSHGPSWRKKYS
LVNRFPGPSDEFPADHAVRPLHGARGGQPPVPQQHVLERQVQLSQGQNVVIKVKPPSKSGSASASGAQRGSLEEF
ETPWSQRPREGEGEPFRGQLQPSRPTRARGTCSVEDPLLVCQKEPGKPRMVKSVGSGVGDSPREPRRTVSESVIA
VKASFPSALPPRTGVALGRKLGSHSVASCAPQLLGDRRVDAGHTDQPVPSGSGVGGPARPASGPRQAREASLVVT
CRTNKFRKNYKWWAASSKSPRVARRALSPRVAAENVCKASAGMANKVEKPQLIADPEPKPRKPATSSKPGSAPS
KYKWKASSPSASSSSFRWQSEASSKDHASQLSPVLSRSPSGDRPAVGHSGLKPLSGETPLSAYKVKSRTKIIRR
RSSTSLPGDKKSGTSPAATAKSHLSLRRRQALRGKSSPVLKKTfPNKGLVQVTTHRLCRLPPSRAHLPTKEASSLH
RRGPLQSIQALQDLRPAQ

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FIGURE 2625

CTCCTGCGCACGCGGCCCGGTGCTGTGCGGAAGCGGCTGTGCGGGTGGCGGCCGGCGCGCGGTGGGGCATGGCGG
GTTTCGCGGGGTGCGGGGCGCACGCGCGCGCGGAGCGTGCGGCCGGAGAAGCGGCGGTCTGAGCCCGAACTGGAGC
CTGAGCCCGAGCCGGAGCCCCCTCCTCTGCACCTCTCCTCTCAGCCACAGCACCGGCAGCGATTCTGGCGTCT
CCGACAGCGAGGAGAGTGTGTTCTCAGGCCTGGAAGATTCCGGCAGTGACAGCAGTGAGGATGATGACGAAGGCG
ACGAGGAGGGAGAGGACGGAGCCCTTGATGACGAGGGCCACAGTGGGATTAAAAAGACCACTGAGGAGCAGGTGC
AGGCCAGCACTCCTTGCCCCGAGGACAGAGATGGCGAGCGCCCGGATTGGGGATGAGTATGCGGAGGACAGCTCTG
ATGAGGAGGACATCCGGAACACGGTGGGCAACGTGCCCTTGAGTGGTACGATGACTTCCCCACGTGGGCTACG
ACCTGGATGGCAGGCGCATCTACAAGCCCCCTGCGGACCCGGGATGAGCTGGACCAGTTCTTGACAAGATGGACG
ATCCTGACTACTGGCGCACCGTGCAGGACCCGATGACAGGGCGGGACCTGAGACTGACGGATGAGCAGGTGGCCC
TGGTGCGGGCGGCTGCAGAGTGGCCAGTTTGGGGATGTGGGCTTCAACCCCTATGAGCCGGCTGTGCACTTCTTCA
GCGGGGACGTCATGATCCACCCGGTGACCAACCGCCCGCGGACAAAGCGCAGCTTCATCCCCTCCTGGTGGAGA
AGGAGAAGGTCTCTCGCATGGTGCACGCCATCAAGATGGGCTGGATCCAGCCTCGCCGGCCCCGAGACCCCCACCC
CCAGCTTCTATGACCTGTGGGCCAGGAGGACCCCAACGCCGTGCTCGGGCGCCACAAGATGCACGTACCTGCTC
CCAAGCTGGCCCTGCCAGGCCACGCCGAGTCTGTAACCCACCCCTGAATACCTGCTCAGCGAGGAGGAGCGCT
TGGCGTGGGAACAGCAGGAGGCCAGGCGAGAGGAAGCTGAGCTTTTTGCCACGCAAGTTCCCGAGCCTGCGGGCCG
TGCCTGCCTACGGACGCTTCATCCAGGAACGCTTCGAGCGCTGCCTTGACCTGTACCTGTGCCACGGCAGCGCA
AGATGAGGGTGAATGTAGACCCTGAGGACCTCATCCCCAAGCTGCCTCGGCCGAGGGACCTGCAGCCCTTCCCCA
CGTGCCAGGCCCTGGTCTACAGGGGCCACAGTGACCTTGTCCGGTGCCTCAGTGTCTCTCCTGGGGGCCAGTGGC
TGGTTTCAGGCTCTGACGACGGCTCCCTGCGGCTCTGGGAGGTGGCCACTGCCCGCTGTGTGAGGACTGTTCCCG
TGGGGGGCGTGGTGAAGAGTGTGGCCTGGAACCCAGCCCCGCTGTCTGCCTGGTGGCTGCAGCCGTGGAGGACT
CGGTGCTGCTGCTGAACCCAGCTCTGGGGGACCGGCTGGTGGCGGGCAGCACAGATCAGCTGTTGAGCGCCTTCG
TCCCGCCTGAGGAGCCCCCTTGCAGCCGGCCCGCTGGCTGGAGGCCCTCAGAGGAGGAGCGCCAAGTGGGCCTGC
GGCTGCGCATCTGCCACGGGAAGCCAGTGACGCAGGTGACCTGGCACGGGCGTGGGGACTACCTGGCCGTGGTGC
TGGCCACCCAAGGCCACACCCAGGTGCTGATTACCAAGCTGAGCCGTGCGCCGAGCCAGAGTCCGTTCCGCCGCA
GCCACGGACAGGTGCAGCGAGTGGCCTTCCACCCTGCCCCGCCCTTCCTGTTGGTGGCGTCCCAGCGCAGCGTCC
GCCTCTACCACCTGCTGCGCCAGGAGCTACCAAGAAGCTGATGCCCAACTGCAAGTGGGTGTCCAGCCTGGCGG
TGCACCCTGCAGGTGACAACGTCATCTGTGGGAGCTACGATAGCAAGCTGGTGTGGTTTGACCTGGATCTTTCCA
CCAAGCCATACAGGATGCTGAGACACCACAAGAAGGCTCTGCGGGCTGTGGCCTTCCACCCGCGGTACCCACTCT
TTGCGTTCAGGCTCGGACGACGGCAGTGTCTGCTGCCATGGCATGGTGTACAATGACCTTCTGCAGAACCCCT
TGCTGGTGGCCGTCAAGGTGCTGAAGGGACAGTGTGCTGACCCGAGATCTGGGAGTGTGGACGTATCTTCCACC
CCACCCAGCCGTGGGTCTTCTCCTCGGGGGCAGACGGGACTGTCCGCCTCTTACCTAGCTGTTCTGCCTGCCTG
GGGCTGGGGTGGTGTGCTGAAGTCAACAGAGCCTTTACCCTGTGCTGCCTGGTGTCTCCACCTTCTTGAATTGG
GGTTGCCAACAAAGCCGCCCCACCACA

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FIGURE 2626

GCCCCGTTGCAAGATGGCGGCGGCCATGCTGGGCCCCGGGGCTGTGTGTGCGCAGCGGGCGGGCGGGCGGGCCCCGGA
AGGCTGGCGCGGCGACGGCGTTAGCCCCGGCCCTCGGCCCTCTTTGCGGCCGCTCCCTCCGCCTATTCCCTCCTT
GCTCGAGATGGATCTGCCCCTGGGCCCCGGCGGGCGGGGCCAGCAACGTCCCGGCTTCCCTGACCAAGCTGTG
GACCCCTCGTGAGCGACCCGGACACCGACGCGCTCATCTGCTGGAGCCCGAGCGGGAACAGCTTCCACGTGTTGCA
CCAGGGCCAGTTTGGCAAGGAGGTGCTGCCCAAGTACTTCAAGCACAACAACATGGCCAGCTTCGTGCGGCAGCT
CAACATGTATGGCTTCCGGAAGTGGTCCACATCGAGCAGGGCGGGCTGGTCAAGCCAGAGAGAGACGACACGGA
GTTCCAGCACCCATGCTTCCCTGCGTGGCCAGGAGCAGCTCCTTGAGAACATCAAGAGGAAAGTGACCAGTGTGTC
CACCCCTGAAGAGTGAAGACATAAAGATCCGCCAGGACAGCGTCACCAAGCTGCTGACGGACGTGCAGCTGATGAA
GGGGAAGCAGGAGTGCACTGGAAGCTCCTGGCCATGAAGCATGAGAATGAGGCTCTGTGGCGGGAGGTGGC
CAGCCTTCGGCAGAAGCATGCCAGCAACAGAAAGTCGTCAACAAGCTCATTAGTTCTGTATCTCACTGGTGCA
GTCAAACCGGATCCTGGGGGTGAAGAGAAAGATCCCCCTGATGCTGAACGACAGTGGCTCAGCACATTCCATGCC
CAAGTATAGCCGGCAGTTCTCCCTGGAGCACGTCCACGGCTCGGGCCCCCTACTCGGCCCTCCCCAGCCTACAG
CAGCTCCAGCCTCTACGCCCCCTGATGCTGTGGCCAGCTCTGGACCCATCATCTCCGACATCACCAGCTGGCTCC
TGCCAGCCCCATGGCCTCCCCCGGCGGGAGCATAGACGAGAGGCCCTATCCAGCAGCCCCCTGGTGCCTGTCAA
GGAGGAGCCCCCAGCCCGCTCAGAGCCCCCGGGTAGAGGAGGCGAGTCCCGGGCGCCCATCTTCCGTGGACAC
CCTCTGTCCCCGACCGCCCTCATTGACTCCATCCTGCGGGAGAGTGAACCTGCCCCCGCTCCGTACAGCCCT
CACGGACGCCAGGGGCCACACGGACACCGAGGGCCGGCTTCCTTCCCCCGGCCACCTCCACCCATGAAAAGTG
CTTCAGGGTAGCCTGCCTGGACAAGAATGAGCTCAGTGACCACTTGGATGCTATGGAATCCAACCTGGATAACCT
GCAGACCATGCTGAGCAGCCACGGCTTCAGCGTGGACACCAAGTGCCTGCTGGACCTGTTTACAGCCCTCGGTGAC
CGTGCCCGACATGAGCCTGCCTGACCTTGACAGCAGCCTGGCCAGTATCCAAGAGCTCCTGTCTCCCCAGGAGCC
CCCCAGGCCTCCCCAGGCGAGAGAACAGCAGCCCGGATTAGGGAAGCAGCTGGTGCCTACACAGCGCAGCCGCT
GTTCTGTGGACCCCGCTCCGTGGACACCGGGAGCAACGACCTGCCGGTGCTGTTTGGAGCTGGGAGAGGGCTC
CTACTTCTCCGAAGGGGACGGCTTCGCCGAGGACCCCAACCATCTCCCTGCTGACAGGCTCGGAGCCTCCCAAAGC
CAAGGACCCCACTGTCTCCTAGAGGCCCCGGAGGAGCTGGGCCAGCCGCCACCCCCACCCCCAGTGCAGGGCTG
GCTTGGGGAGGCGAGGGCAGCCTCGCGGTCTTGGGCAGTGGTGGGTGGGCCGCCATAGCCCCAGTAGGACAAACG
GGCTCGGGTCTGGGCAGCACTCTGGTCAGGAGGGTCACCTGGCCTGCCAGTCTGCCTTCCCCAACCCCGTGT
CCTGTGGTTTGGTTGGGGCTTACAGCCACACCTGGACTGACCCTGCAGGTTGTTTATAGTCAGAATTGATTTT
GGATTTTACACAACCTGTCCCGTTCCCCGCTCCACAGAGATACACAGATATATACACACAGTGGATGGACGGACA
AGACAGGCAGAGATCTATAAACAGACAGGCTCT

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FIGURE 2627

GAAGCTCTGGGAAGGGGATGCCCCGAGGGTGCCAGTCCAGCTAGCTGCCCCACCCCTCAGGCCAGCCTGGCCC
CCAAGCTCCCCACTCTGGTGCCCCGAGCAGCCCTGTGGGCAAGCAGCCGCCGCCATGGCCGAGCACCTGGAGCTG
CTGGCAGAGATGCCCATGGTGGGCAGGATGAGCACACAGGAGCGGCTGAAGCATGCCAGAAGCGGCGCGCCCAG
CAGGTGAAGATGTGGGCCCAGGCTGAGAAGGAGGCCCAGGGCAAGAAGGGTCCTGGGGAGCGTCCCCGGAAGGAG
GCAGCCAGCCAAGGGCTCCTGAAGCAGGTCTCTTCCCTCCCAGTGTGTCCTTCTGGAGGCCGCTGCCCGAAAT
GACCTGGAAGAAGTCCGCCAGTTCCTTGGGAGTGGGGTCAGCCCTGACTTGGCCAACGAGGACGGCCTGACGGCC
CTGCACAGTGCTGCATTGATGATTTCCGAGAGATGGTGACAGCTCCTGGAGGCTGGGGCCAACATCAATGCC
TGTGACAGTGAGTGCTGGACGCCTCTGCATGCTGCGGCCACCTGCGGCCACCTGCACCTGGTGGAGCTGCTCATC
GCCAGTGGCGCCAATCTCCTGGCGGTCAACACCGACGGAACATGCCCTATGACCTGTGTGATGATGAGCAGACG
CTGGAAGTGCCTGGAGACTGCCATGGCAGACCGTGGCATCACCCAGGACAGCATCGAGGCCGCGCGGGCCGTGCCA
GAACTGCGCATGCTGGACGACATCCGGAGCCGGCTGCAGGCCGGGGCAGACCTCCATGCCCCCTGGACCACGGG
GCCACGCTGCTGCACGTCGCAGCCGCCAACGGGTTACGCGAGGCGGCTGCCCTGCTGCTGGAACACCGAGCCAGC
CTGAGCGCTAAGGACCAAGACGGCTGGGAGCCGCTGCACGCCGCGGCTACTGGGGCCAGGTGCCCTTGGTGGAG
CTGCTCGTGCGCGACGGGGCCGACCTGAACGCAAXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXGAGGTGCGGGCCAAGCTTCTGGAAGTGAACACAAGCACGACGCCCTCCTGCGCGCCAGAGCCGCCAGCGC
TCCTTGCTGCGCGCGCCGACCTCCAGCGCCGGCAGCCGCGGGAAGGTGGTGAGGCGGGTGAGCCTAACCCAGCGC
ACCGACCTGTACCGCAAGCAGCACGCCAGGAGGCCATCGTGTGGCAACAGCCGCCGCCACCAGCCCGAGCCG
CCCGAGGACAACGATGACCGCCAGACAGGCGCAGAGCTCAGGCCGCCGCCCGGAGGAGGACAACCCGAAGTG
GTCAGGCCGCAATGGCCGAGTAGGGGGCTCCCCAGTGCGGCATCTATACTCCAAGCGACTAGACCGGAGTGTC
TCCTACCAGCTGAGCCCCCTGGACAGCACACCCCCACACCCCTGGTCCACGACAAGGCCACACACCCCTGGCT
GACCTGAAGCGCCAGCGAGCTGCTGCCAAGCTGCAGCGACCCCCACCTGAGGGGGCCGAGAGCCCTGAGACAGCT
GAGCCTGGCCTGCCTGGTGACACGGTGACCCCCAGCCTGACTGTGGCTTACAGGGCAGGCGGGGACCCACCCCTG
CTAAGCTCACAGCCCCGGCGGTGGAGGCTCCCGTGGAGAGGAGGCCGTGCTGCCTGCTCATGTGAGGCTGTTGC
TCAGCATGCAGGGGCCCTGTCTCGGGCACAGCCCAAGGCTGCCTCCCCACGGTGCGTGCCCTGGTGCTGCGGGTG
CAGCACGGAAACCCCGGCTTCTACTGTACAGGACACTGGCCCCTCTCAGGTCAGAAGACATGCCTGGAGGGATGT
CTGGCTGCAAAGACTATTTTTATCCTGCAACTCTTGATAAAGGGCTGTTTTGCCATGG

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FIGURE 2628

GACCTGAAGCGCCAGCGAGCTGCTGCCAAGCTGCAGCGACCCCCACCTGAGGGGCCCAGAGCCCTGAGACAGCT
GAGCCTGGCCTGCCTGGTGACACGGTGACCCCCCAGCCTGACTGTGGCTTCAGGGCAGGCGGGGACCCACCCCTG
CTCAAGCTCACAGCCCCACGGTGCGTGCCCTGGTGCTGCGGGTGCAGCACGGAAACCCGGCTTCTACTGTACAG
GACACTGGCCCCCTCTCAGGTCAGAAGACATGCCTGGAGGGATGTCTGGCTGCAAAGACTATTTTAA

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FIGURE 2629

ATGGTCACCATGGAGCCCGGGTACCTGTTCTCTGGGTTCTCGCCTGGGCAATTCCTCCTCCTCAAGTACACGGAG
AAGCTGCAGGAGCCCCCGGCCAGTGCTGTCCGTGAGGCTGCCGACAAGGAAGAGCCTCCCTCAAAGAAGAAGCGA
GTGGATGCGACGGCCGGCTGGTCAGCTGCGGGTAAGTCGGTGCCGAGGATGAGGTGGACGAGATTGAAGTGTAC
GGCAGCGAGGCCAGTCCGGGAACACAGCTGGCCACCTACTCCTTTGAGGTGTGTGACAGCATCCTGAACATTGGA
CCCTGTGCCAATGCCGCCGTGGGCGAACCTGCCTTCTCTCTAAAGAGTTTCAGAACAGCCCCGAGCCGGACCTG
GAGATTGTGGTTTGTCTCCGGCCACGGGAAGAACGGGGCTTTGTCTGGTGTGTCAGAAGAGCATCCGGCCCCAGGTG
GTGACAACATTGAGCTTCCCGGCTGCTATGACATGTGGACAGTCATCGCCCCGGTGCCTAAGGAGGAGGAGGAC
AATCCCAAGGGGGAGGGCACAGAGCAGGAACCCAGCACCACCCCTGAAGCAGACGACGACGGCCGAGACACGGA
TTCCTGATTCTGAGCCGGGAAGACTCCACCATGATCCTGCAGACGGGGCAGGAGATCATGGAGCTGGACACCAGT
GGCTTCGCCACTCAGGGCCCCACGGTCTTTGCTGGGAACATCGGGGACAACCGCTACATTGTCCAAGTGTACCA
CTGGGCATCCGCTGCTGGAAGGAGTGAATCAGCTGCACTTCATCCCGTGGACCTGGGCGCCCCCATCGTGACG
TGCGCCGTGGCCGACCCCTATGTGGTCATCATGAGTGCCGAGGGCCACGTCACCATGTTCTGTGTAAGAGTGAC
TCCTACGGTGGCCGCCACCACCGCTGGCGCTGCACAAGCCCCGCTGCACCATCAGTCCAAGGTGATTACGCTG
TGCTGTACCGAGACCTCAGCGGCATGTTCAACCTGAGAGCCGCTGGGTGGGGCCCGTGACGAGCTCGGGGGC
CGCAGTGGCCCCGAGGGCCGAGGGCCTGGGCTCAGAGACTAGCCCCACAGTGGATGACGAGGAGGAGATGCTGTAT
GGGGATTCTGGGCTCCCTCTTCAGCCCCAGCAAGGAGGAGGCCGAAGAAGCAGCCAGCCCCCTGTGACCGGGAC
CCTGCACCCCTTCGGGGCAGAGCCTACCCACTGGTGCTGTGGTGCGGGAGAATGGCACCATGGAGATCTACCAG
CTTCCCGACTGGCGGCTGGTGTTCCTGGTGAAGAACTTCCTGTGGGGCAGCGGGTCTTGTGGACAGCTCCTTT
GGACAGCCCACTACACAGGGCGAGGCCCGCAGGGAGGAGGCCACGCGCCAGGGGGAGCTGCCCTCGTCAAGGAG
GTGCTGTGGTGGCGCTGGGCAGCCGCCAGAGCAGGCCCTACCTGCTGGTGCATGTGGACCAAGAGCTGCTTATC
TACGAGGCCTTCCCCACGACTCTCAGCTCGGCCAGGGCAATCTCAAAGTCCGCTTTAAGAAGGTCCCTCACAAC
ATCAACTTCCGTGAGAAGAAGCCAAAGCCATCCAAGAAGAAAGCAGAAGGTGGCGGCGCAGAGGAGGGGGCTGGG
GCCCCGGGCTCGTGGCGCGTTTCCGCTACTTCGAGGATATTTATGGCTACTCAGGGGTCTTCATCTGCGGCCCC
TCCCTCACTGGCTCTTGGTGACCGGCCGAGGGGCTCTGCGGCTACACCCCATGGCCATCGACGGCCCCGGTGCAC
TCTTTGCTCCATTCCACAATGTCAACTGTCCCCGCGGCTTCCTGTACTTCAACAGACAGGGCGAGCTGAGGATC
AGTGTCTCTGCCTGCCTACCTGTCTATGATGCCCATGGCCTGTCAGGAAGATCCCGCAGCGTTGCACGGCCCCAC
TATGTGGCTTACCACGTGGAGTTTAAGGTGTATGCTGTGGCCACCAGCACCACACGCCGTGTGCCCGCATCCCA
CGCATGACTGGCGAGGAGAAGGAGTTTGAGACCATCGAGAGAGATGAGCGGTACATCCACCCCCAGCAGGAGGCC
TTCTCCATCCAGCTCATCTCCCGGTGAGCTGGGAGGCTATTCCCAATGCCAGGATCGAGCTGCAGGAGTGGGAG
CATGTGACCTGCATGAAGACAGTGTCTCTGCGCAGTGAGGAGACCGTGTGCGGCCCTCAAAGGCTACGTGGCCGCC
GGGACCTGCCTCATGCAGGGGGAGGAGGTCACGTGCCGAGGGCGGATCTTGATCATGGATGTGATTGAGGTGGTG
CCCGAGCCTGGCCAGCCCTTGACCAAGAACAAGTTCAAAGTCCTTTACGAGAAGGAGCAGAAGGGGGCCCGTGACC
GCCCTGTGCCACTGCAATGGCCACCTGGTGTGCGCCATCGGCCAGAAGATTTTCTGTGGAGCCTGCGGGCCAGC
GAGCTGACGGGCATGGCCTTCATCGACACGCAGCTCTACATACACCAGATGATCAGCGTCAAGAACTTCATCCTG
GCAGCCGACGTGATGAAGAGCATTTGCTGTGCTGCGCTACCAGGAGGAAAGCAAGACGCTGAGCCTGGTGTGCGG
GATGCCAAGCCCTGGAGGTGTACAGCGTGGACTTCATGGTGGACAATGCCAGCTGGGTTTTCTGGTGTCTGAC
CGCGACCGCAACCTCATGGTGTACATGTACCTGCCGAAGCCAAGGAGAGTTTCGGGGGCATGCGCCTGCTGCGT
CGGGCAGACTTCCACGTGGGTGCCACGTGAACACGTTTGGAGGACCCCGTGCCGGGGGGCCACTGAAGGGCTC
AGCAAAAAGTCGGTGTGTGGGAGAATAAGCACATCAGTGGTTTGCCACCCCTGGACGGCGGCATCGGGCTGCTG
CTGCCCATGCAGGAGAAGACCTACCGCGCGCTGCTGATGCTGCAGAACGCGCTGACCACCATGCTGCCACACCAC
GCCGGCCTCAACCCCCGCGCCTTCCGGATGCTGCAGTGGACCGCCGACCCCTCCAGAATGCCGTGCGCAACGTG
CTGGATGGGGAGCTGCTCAACCGCTACCTGTACCTGAGCACCATGGAGCGCAGCGAGGTGACCAAGAAGATCGGC
ACCACACCAGACATAATCCTGGACGACTTGCTGGAGACGGACCGCTACCGCCCACTTCTAGCCCCGTGGATGC
CGTCACCACCAGCACACGGAACCTACCTCCCACCCCTTTTTGTACAAAACACAAGGAAAAACATTTTTTG

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FIGURE 2630

MYAVYKQAHPPGTGLEFSMYCNFFNNSERNLVVAGTSQLYVYRLNRDAEALTKNDRSTEGKAHREKLELAASFSTF
GNVMSMASVQLAGAKRDALLSFKDAKLSVVEYDPGTHDLKTLSTLHYFEEPELRDGFVQNVHTPRVRVDPDGRCA
AMLVYGTRLVVLPPFRRESLAEHEGLVGEGQRSSFLPSYIIDVRALDEKLLNIIDLQFLHGYEPTLLILFEPNQ
TWPGRVAVRQDTCISIVAISLNIQKVHPVIWSLTSLPFDCTQALAVPKPIGGVVVFAVNSLLYLNQSVPPYGV
NSLTTGTTAFPLRTQEGVRITLDCAQATFISYDKMVISLKGGEIYVLTITDGMRSVRAFHFDKAAASVLTSMV
TMEPGYLFLGSRLLGNSLLLKYTEKLQEPASAVREAADKEEPPSKKKRVDATAGWSAAGKSVPQDEVDEIEVYGS
EAQSGTQLATYSFEVCD SILNIGPCANAAVGEPAFLSKEFQNSPEPDLEIVVCSGHGKNGALSVLQKSI
RQVVT
TFELPGCYDMWTVIAPVRKEEDNPKGEGTEQEPSTTPEADDDGRRHGFLILSREDSTMILQTGQEI
MELDTSGF
ATQGPTVFAIGNIDNRYIVQVSPLGIRLLEGVNQLHFIPVDLGAPIVQCAVADPYVIMSAEGHVTMFLKSDSY
GGRHRLALHKPPLHHQSKVITLCLYRDLSGMFTTESRLGGARDELGGRSGPEAEGLGSETSP
TVDDEEEMLYGD
SGSLFSPSKEEARRSSQPPADRDPAFFRAEP THWCLLVRENGTMEIYQLPDWRLVFLVKNFPV
GQRVLVDSSFGQ
PTTQGEARREEATRQGELPLVKEVLLVALGSRQSRPYLLVHVDQELLIYEAFPHDSQLGQGNLKV
RFKKVPHNIN
FREKKPKPSKKKAEGGGAEEGAGARGLVARFRYFEDIYGYSGVFIGPSPHWLLVTGRGALRLHP
MAIDGPVDSF
APFHNVCPRGFLYFNQGE LRISVLPAYLSYDAPWPVRKIPQRC TAHYVAYHVEFKVYAVATST
NTPCARIPRM
TGEEKEFETIERDERYIHPQGEAFSIQLISPVSWEAIPNARIELQEW EHVTCMKTVSLRSEETV
SGLKGYAAGT
CLMQGEEVTCRGRILIMDVIEVVPEPGQPLTKNFKVLYEKEQKGPVTALCHCNGHLVSAIGQKIF
LWSLRASEL
TGMAFIDTQLYIHQMISVKNFILAADVMSISLLRYQEESKTL SLVSRDAKPLEVYSVDFMVDNA
QLGFLVSDRD
RNLVMYMYLPEAKESFGGMRLRRADFHVGAVNTFWRTPCRGATEGLSKKSVVWENKHITWFATL
DGGIGLLLP
MQEKTYYRLLMLQNALTTMLPHHAGLNPRAFRMLHVDRTLQNAVRNVLDGELLNRYLYLSTMER
SEVAKKIGTT
PDIILDDLLETDRVTAHF

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FIGURE 2631

AATGGACGAGAGAGGCGGCCGTCCATTAGTTAGCGGCTCCGGAGCAACGCAGCCGTTGTCCTTGAGGCCGACGGG
CCTGACGCGGGCGGGTTGAACGCGCTGGTGAGGCGGTACCCGGGCTACGGCGGCCGGCAGGGGGCAGTGGCGGC
CGTTGTCTAGGGCCCCGAGGTGGGGCCGCGCGCCTCGGGCGCTACGAACCCGGCAGGCCACGCTTGGCTGCGGC
CGGGTGCGGGCTGAGGCCATGGGCGACCGCGGCAGCTCCCGGCGCCGGAGGACAGGGTCGCGGCCCTCGAGCCAC
GGCGGCGGCGGGCCTGCGGCGGCGGAAGAGGAGGTGCGGGACGCCGCTGCGGGCCCCGACGTGGGAGCCGCGGGG
GACGCGCCAGCCCCGGCCCCCAACAAGGACGGAGACGCCGGCGTGGGCAGCGGCCACTGGGAGCTGAGGTGCCAT
CGCCTGCAGGATTCTTTATTAGCTCTGACAGTGGCTTCAGCAACTACCGTGGCATCCTGAAGTGGTGTGTGGTG
ATGCTGATCTTGAGCAATGCCCGTTATTTCTGGAGAACCTCATCAAGTATGGCATCCTGGTGGACCCCATCCAG
GTGGTTTCTCTGTTCCCTGAAGGATCCCTATAGCTGGCCCCGCCCATGCCTGGTTATTGCGGCCAATGTCTTTGCT
GTGGCTGCATTCCAGGTTGAGAAGCGCCTGGCGGTGGGTGCCCTGACGGAGCAGGCGGGACTGCTGCTGCACGTG
GCCAACCTGGCCACCATTCTGTGTTTCCCAGCGGCTGTGGTCTTACTGGTTGAGTCTATCACTCCAGTGGGCTCC
CTGCTGGCGCTGATGGCGCACACCATCCTCTTCCTCAAGCTCTTCTCCTACCGCGACGTCAACTCATGGTGCCGC
AGGGCCAGGGCCAAGGCTGCCTCTGCAGGGAAGAAGGCCAGCAGTGTGCTGCCCCGCACACCGTGAGCTACCCG
GACAATCTGACCTACCGCGATCTCTACTACTTCTCTTCGCCCCACCTTGTGCTACGAGCTCAACTTTCCCCGC
TCTCCCCGCATCCGGAAGCGCTTTCTGCTGCGACGGATCCTTGAGATGCTGTTCTTCACCCAGCTCCAGGTGGGG
CTGATCCAGCAGTGGATGGTCCCCACCATCCAGAACTCCATGAAGCCCTTCAAGGACATGGACTACTCACGCATC
ATCGAGCGCTCCTGAAGCTGGCGGTCCCCAATCACCTCATCTGGCTCATCTTCTTCTACTGGCTCTTCCACTCC
TGCCTGAATGCCGTGGCTGAGCTCATGCAGTTTGAGAGACCGGGAGTTCTACCGGGACTGGTGGAACTCCGAGTCT
GTCACCTACTTCTGGCAGAACTGGAACATCCCTGTGCACAAGTGGTGCATCAGACACTTCTACAAGCCCATGCTT
CGACGGGGCAGCAGCAAGTGGATGGCCAGGACAGGGGTGTTCTGGCCTCGGCCTTCTTCCACGAGTACCTGGTG
AGCGTCCCTCTGCGAATGTTCCGCTCTGGGCGTTACGGGCATGATGGCTCAGATCCCCTGGCCTGGTTTCGTG
GGCCGCTTTTTCCAGGGCAACTATGGCAACGCAGCTGTGTGGCTGTGCTCATCATCGGACAGCCAATAGCCGTC
CTCATGTACGTCCACGACTACTACGTGCTCAACTATGAGGCCCCAGCGGCAGAGGCCCTGAGCTGCACCTGAGGGC
CTGGCTTCTCACTGCCACCTCACACCCGCTGCCAGAGCCCACCTCTCCTCCTAGGCCTCGAGTGCTGGGGATGGG
CCTGGCTGCACAGCATCCTCCTCTGGTCCCAGGGAGGCCTCTCTGCCCCATGGGGCTCTGTCTGCACCCCTCA
GGGATGGCGACAGCAGGCCAGACACAGTCTGATGCCAGCTGGGAGTCTTGCTGACCCTGCCCCGGGTCCGAGGGT
GTCAATAAAGTGCTGTCCAGTG

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FIGURE 2632

MGDRGSSRRRRRTGSRPSSHGGGGPAAAEVEVRDAAAGPDVGAAGDAPAPAPNKG DG DAGVSGSHWELRCHRLQDSL
FSSDSGFSNYRGILNWCVVMLILSNARLFLENLIKYGILVDPIQVVSFLKDPYSWPAPCLVIAANVFAVA AFQV
EKRLAVGALTEQAGLLLHVANLATILCFPAAVVLLVESITPVGSLLALMAHTILFLKLSYRDVNSWCRRARAKA
ASAGKKASSAAAPHTVSYPDNLT YRDLYYFLFAPTLCYELNFPRSPRIRKRFLLRRILEMLFFTQLQVGLIQQWM
VPTIQNSMKPFKDMDYSRIIERLLKLAVPNHLIWLIFFYWLFHSCNVAELMQFGDREFYRDWWNSESVTYFWQ
NWNIPVHKWCIRHFYKPMLRRGSSKWMARTGVFLASAFFHEYLVSVPLRMFRLWAF TGMMAQIPLAWFVGRFFQG
NYGNAAVWLSLIIGQPIAVLMYVHDYYVLN YEAPAAEA .

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FIGURE 2634

MGRVIRGQRKGAGSVFRAHVKHKGAARLRAVDFAERHGYIKGIVKDI IHDPGRGAPLAKVVFRDPYRFKKRTEL
FIAAEGIHTGQFVYCGKKAQLNIGNVLPVGTMP EGTIVCCLEEKPGDRGKLARASGNYATVISHNPETKKTRVKL
PSGSKKVISSANRAVVGVVAGGGRIDKPILKAGRAYHKYKAKRNCWPRVRGVAMNPVEHPFGGGNHQHIGKPSTI
RRDAPAGRKVGGLIAARRTGRLRGTKTVQEKEN

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FIGURE 2635

GCGGCATGGGCAGTATCCGCCGCCATCCTCTTCCGTGAGGCGCGCTGAGACCCGGACCGGCCCTCCTGAGAGGAT
GCCGGTGCGGGCGCCCCGCGGAGAGGGACCCGTCGCCATGGGCCGTGTGATCCGTGGACAGAGGAAGGGCGCCGGG
TCTGTGTTCCGCGCGCACGTGAAGCACCGTAAAGGCGCTGCGCGCCTGCGCGCCGTGGATTTTCGCTGAGCGGCAC
GGCTACATCAAGGGCATCGTCAAGGACATCATCCACGACCCGGGCGCGGCGCGCCCCCTCGCCAAGGTGGTCTTC
CGGGATCCGTATCGGTTTAAGAAGCGGACGGAGCTGTTCAATTGCCCGGAGGGCATTACACGGGGCCAGTTTGTG
TATTGCGGCAAGAAGGCCCAGCTCAACATTGGCAATGTGCTCCCTGTGGGCACCATGCCTGAGGGTACAATCGTG
TGCTGCCTGGAGGAGAAGCCTGGAGACCGTGGCAAGCTGGCCCGGGCATCAGGGAACATGCCACCGTTATCTCC
CACAACCCTGAGACCAAGAAGACCCGTGTGAAGCTGCCCTCCGGCTCCAAGAAGGTTATCTCCTCAGCCAACAGA
GCTGTGGTTGGTGTGGTGGCTGGAGGTGGCCGAATTGACAAACCCATCTTGAAGGCTGGCCGGGCGTACCACAAA
TATAAGGCAAAGAGGAACCTGCTGGCCACGAGTACGGGGTGTGGCCATGAATCCTGTGGAGCATCCTTTTGGAGGT
GGCAACCACCAGCACATCGGCAAGCCCTCCACCATCCGCAGAGATGCCCTGCTGGCCGCAAAGTGGGTCTCATT
GCTGCCCCCGGACTGGACGTCTCCGGGGAACCAAGACTGTGCAGGAGAAAGAGAAGTATGCTGAGGGCCTCAA
TAAAGTTTGTGTTTATGCCAAA

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FIGURE 2636

MGRVIRGQRKGAGSVFRAHVKHRKGAARLRAVDFAERHGYIKGIVKDI IHDPGRGAPLAKVVFRDPYRFKKRTEL
FIAAEGIHTGQFVYCGKKAQLNIGNVLPVGTMPGTTIVCCLEEKPGDRGKLARASGNYATVISHNPETKKTRVKL
PSGSKKVISSANRAVVGVVAGGGRIDKPILKAGRAYHKYKAKRNCWPRVRGVAMNPVEHPFGGGNHQHIGKPSTI
RRDAPAGRKVGLIAARRTGRLRGTKTVQEKEN

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FIGURE 2637

CTGTCTCCGGTCCGTGCCTCCAAGATGACAAAGAAAAGAAGGAACAATGGTCGTGCCAAAAGGGCTGCGGGCCAC
GTGCAGCCTATTCGCTGCACTAACTGTGCCCAGATGCATGCCAAGGACAAGGCCATTAAGAAATTCGTCATTCTGA
AACATAGTGGAGGCCGAGCAGTCAGGGACATTTCTGAAGCGAGCGTCTTCGATGCCTATGTGCTTCCCAAGCTG
TATGTGAAGCTACATTACTGTGTGAGTTGTGCAATTCACAGCAAAGTAGTCAGGAATCGATCTCGTGAAGTCCGC
AAGGACCGAACACCCCCACCCCGATTTAGACCTGCGGGTGCTGCCCCACGTCCCCACCAAAGCCCATGTAAGGA
GCTGAGTTCTTAAAGACTGAAGACAGGCTATTCTCTGGAGAAAAATAAAATGGAAATTGTACTT

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FIGURE 2638

TTTTCTGGGGGCAGCAGCCGGGCTGAGAGGAGAGTGGCTGTCTACTCTCTCCGCCATGGCGTGTGTCCGCCCAC
TGATGTCGCTGTACTCCGAAAAGGGGGAGTCATCTGGCAAAAATGTCACTTAGCCCGCTGTATTCAAGGCTCCTA
TTCGACCAGACATCGTGAACTTTGTTCACACCAACTTGC GCAAAAACAACAGACAGCCCTACGCTGCCAGTGAAT
TAGCAGGTCATCGGACCAGCACTGAGTCTTGGGGTACTGGCAGAGCTGTGGCTCGAATCCCAGAGTTCGAGGTG
GTGGGACTCACCGCTCCGGCCAGGGTGCTTTTGAAAACATGTGTCGTGGAGGCCGAAGGTTTGCACCAACCAAAA
CCTGGCGCCGTTGGCATCGTAGAGTGAACACAACCCAAAAACGGTATGCCATCTGTTCTGCCCTGGCTGCCCTCAG
CCCTACCAGCACTGGTCATGTCTAAAGGTCATCGTATTGAGGAAGTTCCTGAACTTCCTTTGGTAGTCGAAGATA
AAGTTGAAGGCTACAGGAAGACCAAGGAAGCTGTTTTGCTCCTTAAGAACTTAAAGCCAGGAACGATATCAAAA
AGGTCTATGCCTCTCAGCGAATGAGAGCTGGCAAAGGCAAAATGAGAAACCGTCGCCGTATCCAGCGCAGGGGCC
CGTGCATCATCTATAATGAGGATAATGGTATCAAGGCCTTCAGAAACATCCCTGCAATTACTCTGCTTAATGTAA
GCAAGCTGACCATTTTGAAGCTTGCTCCTGGTGGGCACGTGGGACGTTTCTGCATTTGGACTGGAAGTGCTTTCC
GGAAGTTGGATGAATTGTATGGCACTTGGCGTAAAGCCGCTTCCCTCAAGAGTAACTACAATCTTCCCATGCACA
AGATGATTAATACAGATCTTAGCAGAATCTTGAAAAGCCAGAGATCCAAAGAGCCTTTCGGGCACCAAGCAAGA
AGATTCATCGCAGAGTCCTAAAGAAGAACCCACTGAAAACTTGAGAATCATGTTGAAGCTAAACCCATATGCAA
AGACCATGCGCCGGAACACCATTCCTTCGCCAGGCCAGGAATCACAAGCTCCGGATGGATAAGGCAGCTGCTGCTG
CAGCAGCACTAGAAGCCAAACCAGATGAGAAGGCGGCGGTTGCAGGCAAGAAGCCTGTGGTAGGTAAGAAAGGAA
AGAAGGCTGCTGTTGGTGTGAAGAAGCAGAAGAAGCCTCTGGTGGGAAAAAAGGCAGCAGCTACCAAGAAATCAG
CCCCTGAAAAGAAGCCTGCAGAAAAGAAACCTACTGTAGAGGAAAAGAAGCCTGCTGCATTAACTCTTAAATTTG
ATTATTCCATAAAGGTCAAATCATTGTGGACAGCTTCTTTTGAATAAAGACCTGATTATACAGGCAGTGAGAAAC
A

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FIGURE 2639

MCRGGRRFAPTKTWRRWHRVNTTQKRYAICSALAASALPALVMSKGHRIEEVPELPLVVEDKVEGYRKTKEAVL
LLKKLKARNDIKKVYASQRM RAGKGKMRNRRRIQRRGPCIIYNEDNGIKAFRNIPAITLLNVSKLTISK LAPGGH
VGRFCIWTGSAFRKLDELYGTWRKAASLKSNNLPMHKMINTDLSRILKSPEIQRAFRAPSKKIHRRVLKKNPLK
NLRIMLKLNPYAKTMRNTILRQARNHKL RMDKAAAAAALEAKPDEKAAVAGKKPVVGKKGKAAVGVKKQKKP
LVGKAAATKKSAP EKKPAEKKPTVEEKKPAALTLKFDYSIKVKSLWTASFE

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FIGURE 2640

CTGAGTCTTGGGGTACTGGCAGAGCTGTGGCTCGAATTCCCAGAGTTCGAGGTGGTGGGACTCACCGCTCCGGCC
AGGGTGCTTTTGGAAACATGTGTCGTGGAGGCCGAAGGTTTGCACCAACCAAAACCTGGCGCCGTTGGCATCGTA
GAGTGAACACAACCCAAAAACGGTATGCCATCTGTTCTGCCCTGGCTGCCTCAGCCCTACCAGCACTGGTCATGT
CTAAAGGTCATCGTATTGAGGAAGTTCCTGAACTTCCTTTGGTAGTCGAAGATAAAGTTGAAGGCTACAGGAAGA
CCAAGGAAGCTGTTTTGCTCCTTAAGAAATCAGCCCTGAAAAGAAGCCTGCAGAAAAGAAACCTACTGTAGAGG
AAAAGAAGCCTGCTGCATTAACCTTAAATTTGATTATTCATAAAGGTCAAATCATTGTGGACAGCTTCTTTG
AATAAAGACCTGATTATACAGGCAGTGAG

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FIGURE 2641

AGAGCTGTGGCTCGAATTCCCAGAGTTCGAGGTGGTGGGACTCACCGCTCCGGCCAGGGTGCTTTTGGAACATG
TGTCGTGGAGGCCGAAGGTTTGCACCAACCAAAACCTGGCGCCGTTGGCATCGTAGAGTGAACACAACCCAAAAA
CGGTATGCCATCTGTTCTGCCCTGGCTGCCTCAGCCCTACCAGCACTGGTCATGTCTAAAGGTCATCGTATTGAG
GAAGTTCCTGAAC TTCCTTTGGTAGTCGAAGATAAAGTTGAAGGCTACAGGAAGACCAAGGAAGCTGTTTTGCTC
CTTAAGAACTTAAAGCCAGGAACGATATCAAAAAGGCAGCAGCTACCAAGAAATCAGCCCCTGAAAAGAAGCCT
GCAGAAAAGAAACCTACTGTAGAGGAAAAGAAGCCTGCTGCATTAACCTTAAATTTGATTATTCCATAAAGGTC
AAATCATTGTGGACAGCTTCTTTTGAATAAAGACCTGATTATACAGGC

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FIGURE 2642

AGTGGCGGTGTCTGTGATGGTCCGGAGCGAGGCCTCGGCCAATCTGGGTGGCGTGCCCGAGCGAGATTAAAGATGC
AGTACGCCACGGGGCCACTGCTCAAGTTCCAGATTTGTGTTTCCTGAGGTTATAGGCGGGTGTTTGAGGAGTACA
TGTGGGTACTAGCCAGGGGTACCCAGACATCCGTATTGAAGGAGAGAATTACCTCCCTCAACCAATGTATAGAC
ACATAGCATCTTTCTGTGAGTCTTCAAACCTAGTATTAATAGGCTTAATAATTGTTGGCAAGGATCCTTTTGCTT
TCTTTGGCATGCAAGCTCCTAGCATCTGGCAGTGGGGCCAAGAAAATAAGGTCTATGCATGTATGATGGTTTTCT
TCTTGAGCAACATGATTGAGAACCAGTGTATGTCAACAGGTGCATTTGAGATAACTTTAAATGATGTACCTGTGT
GGTCTAAGCTGGAATCCGGTCACCTTCCATCCATGCAACAGCTTGTTCAAATTCCTTGACAATGAAATGAAGCTCA
ATGTGCATATGGATTCAATCCACACCATCGATCATAGCACCACCTATCAGCACTGAAAACCTTTTGCATTAAG
GGATCATTCCAAGAGCAGCTTGACTGACATTATGAAGGCCTGTACTGAAGAGAGCAAGCTGTTAGTACAGACCAA
ATGCTTTCTTAGCATGCTCGTTGTACCTCTTGAAAAACCTCAATGCAAGATAGCTTTCCCGTGTGGCATATTTT
GGAATTCCTCACATTCATGGAGTGCAATAATACTGTATAGCTTTCCCCACCCCCACACAATCACCAGTTAATG
TGTGTTTTTTTTTAAGGTAGACATTACTACTTGTAACTTTTTTCCTTAGTCGTATTTGAAAAAGTAGAAAATTGA
GTTACAATTTGATTTTTTTTCCAAAGATGTCTGTTAAATCTGTTGTGCTTTTATATGAATATTTGTTTTTTATAG
TTTAAATTCATCCTTTGGGAATCCAGTTGAAGTTCCCAAATACTTTATAAGAGTTTATCAGACATCTCTAATTT
GGCCATGTCCAGTTTATATAGTTTACAAAATACAGCAGATGCAAGATTATGGGGGAAATCCTATATTCAGAGTAC
TCTACAAATTTTTGTGTATGTGTGTATGTGCGTGTGATTACCAGAGAACCTACTAAAAAAACCAACTGCTTTTTAA
ATCCTATTGTGTAGTTCAAGTGTGATGCCTTGACCAATCTAATGAATTGATTAATTAACCTGGGCCTTTTACTTA
ACTAAATAAAAAACTAAGCAGATATGAGTT

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FIGURE 2643

CSTPRGHCSSSRFVFPEGYRRVFEEYMWVTSQGYPDIRIEGENYLPQPMYRHIAFSLSVFKLVLIIGLIIVGKDPF
AFFGMQAPSIWQWGQENKVYACMMVFFLSNMIENQCMSTGAFEITLNDVPVWSKLESGHLPSMQQLVQILDNEMK
LNVHMDSIPHRS

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FIGURE 2644

AGTGGCGGTGCTGTGATGGTCCGGAGCGAGGCCTCGGCCAATCTGGGTGGCGTGCCCAGCGAGATTAAAGATGC
AGTACGCCACGGGGCCACTGCTCAAGTTCCAGATTTGTGTTTCCTGAGGTTATAGGCGGGTGTTTGAGGAGTACA
TGTGGGTTACTAGCCAGGGGTACCCAGACATCCGTATTGAAGGAGAGAATTACCTCCCTCAACCAATGTATAGAC
ACATAGCATCTTTCTGTCAGTCTTCAAAGTAGTATTAATAGGCTTAATAATTGTTGGCAAGGATCCTTTTGCTT
TCTTTGGCATGCAAGCTCCTAGCATCTGGCAGTGGGGCCAAGACCAGTGTATGTCAACAGGTGCATTTGAGATAA
CTTTAAATGATGTACCTGTGTGGTCTAAGCTGGAATCCGGTCACCTTCCATCCATGCAACAGCTTGTTCAAATTC
TTGACAATGAAATGAAGCTCAATGTGCATATGGATTCAATCCCACACCATCGATCATAGCACCACCT

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FIGURE 2645

GGGAGATTAAACCTTGGATTCTAGGTGGTAGAGGATAATTTTTTTTTGAATGAATTTCTTTTTATTTATTTATT
TATTTTTTTTCCTTTTTAGGATAGAATTTTTGCGGCATTTGAAGAGCTTTTTCCAGATTATGTTTAAAATTGAAAC
CAAGCCATGTGGTGAAGAACTCAAGGGTGGGGATAAAGTGCTGATGACCTGTGTTGGCATTGGTTTCTCCAACCT
TAGCAAGACCCTCAAGTGATAACCATCACAAGATAAGGCCCAATGCCTACAGACAAAGCAGAAGCTGCCACGGA
CACCAATGGGACCAAGTCCAAATGGATTAATCCAGGACAGAATAGCCACTTGCTTAATTTTCTGTGAAGAAATAT
CAATATACAAATAAAAGACATCCCTGTAGCATATGGTTTCCAGCTGTTTCTCCAGTGGCATTGCCATTGCCCAGG
AGGGGGCCAGTCAACATGAGAGCTCCCTTGCCCTTACCTGGAGGAAGAATGTGCCTTCAGGCCACAGTCGTGCTGC
TAGAACAGTCTCGTAGCTGCAGTTTCACTGTGCTTCCCTCAGCCTACTATCATAGGCTTCCCTCAGCCCTCTGTCTAT
ATGGCTGTTTTGCAAACCTGTGGAGTCTGTTACTGTTCTTTCTGCAAGGACTCACCTCCTTGAGCCTTGGTTTTT
GTTGTAGGGATTAAATGAGATAATATGAGTGGCAGCTCTTCATGAGTCCTGCAGTGCTAAGCAAATGTCAGAAAT
TGGTGTATTAGACTATTTATCTTTGATCTTCTGAATGGATTGCTGTCTATGGACACGGACACGGATCTTCATCTGG
TTCATTGTATTTATATGTGAGGGATGGATGGCTGCGGGGCTCCAAGAGCAGCCTCCTGAAGTGAGGGTGGCAAGT
ATGTGACAGGGCACCCACAAAGGCAGACAAGGACTCTGAGAACCAACAGGACTTCTCTGGTCTTATTCTGAGGCT
AAGACAAAACCGCACCTGAGCCAGATCTCTCAGCCTGGCAGCTCCAGGACCCGTGGGCCCTGCCACTGGCCCAT
CTCAACGGCTAGGACCTAGAGCATCATCAAGCTGCAGGTTAAACAGGTTGGTTGGTTCTGATTTGACTGCACCTC
TACAAGGACCTATGGCTGCACTTGTTGATACTTTCCCAGGAGCCACAACACTGAGCAATGAGGGGAGGAGCATG
TGTTAGTTCAATTCATCAAGTCCTAAATGTTAACTACTATGTGCCAGGTGCTGAGCCAGGCACAGAGATACCATG
ATGAACAAGACACATAAATCTTACCCTCATTGAGCTTACACCATGTGAAAGAGAAGTATGAAATAATTATACGTT
ATTTTTTTTTTAGTTTTTGAGATGGAGTTTCACTTTTGTCCCCAGGCTGGAGTGCGGTGGTGTGACCTCAGCTCA
CTGCAACCTCTGCCTCCCAGGTTCAAGCGATTCTCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGGCACCTG
CCACCATGCCTGGCTAAATTTTGTATTTTTTAGTAGAGACGGGCTTTCACCATGTTGGTCAGGCTAGTCTTGAAC
CTGGCCTCAGGTGATCCTCCCACCTTGGCCTCCCAAGTGCTGGGATTGCAGGCGTGAGCCACGGCACCTCACA
AATTACACATTATTCAACTGTAACTGTGAAAGTGATTCTAAGGAAAAAGTACAGAGAGCTGTGGGAAAACATAAT
AGGAAATCTTTGTCATTCTGTCACTATTGTCTATTAGGCTGTCACTGTTGTCTATTGTACCCCTACCCCTCTCGCA
GAGAGTGGTTCCCATTTGCCAGAGCTCATTATTGTCTCTGAAGGTCTGTGAAAAGATGACAAAGTCGTGTTGCC
TCTTTCCACTTTCCCAAGTCTCACGTGAGCACCCCTAACTGGCAGAATCAATTCACACCCACAAGCCTAGCTGCA
AGGGGACCTGGGAAATGTATCCCAGCTTTCCAACCTCTCCACCCAGGAGATGAAACAGCCAATTTAGGCCAGGT
GCAATGGCTTACACATGTAAAACCAGCACTATGGGAGGCTGAGGAGGGAAGATTACTTGAGCCCAGGAGTTTGAG
ACCAGCCTGGACAACAGGGCGAGACCATCATCTCTACAAAAAATACAAAAAAATTAGCTAGGCGTGGTGTCTCTG
TGCCTGTGGTCCCAGCTCCTCAGGAGGCTGAGGCAGGAGGATCGCTTGAGATCGAGGCTGCAGTGAGCCGTGATC
GCGCCACTGCACTCCAGTCTGGGTGACAGCGAGACCCTATCTCAAAAAAG

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FIGURE 2646

CTCAGCTACGCAGGGTGCAACTTCTTGCGCCAACGTCTGGTCCTGTCTACCCTGAGCGGGCGCCCCGTCAAATC
CGAAAGATTTCGGGCCAGAGACGACAACCCGGGCCTCCGAGATTTTGAAGCCAGCTTCATAAGGCTATTGGACAAA
ATAACGAATGGTTCTCGAATTGAAATAAACCAAACAGGAACAACCTTATATTATCAGCCTGGCCTCCTGTATGGT
GGATCTGTGGAACATGACTGTAGCGTCCTTCGTGGCATTGGGTATTACCTGGAGAGTCTTCTTTGCTTGGCTCCA
TTTATGAAGCACCCGTAAAAATAGTTCTACGAGGAGTGACCAATGATCAGGTTGACCCTTCAGTTGATGTTCTT
AAGGCAACAGCACTCCCTTTGTTGAAACAATTTGGGATTGATGGTGAATCATTGAACTGAAGATTGTGCGACGG
GGAATGCCTCCCGGAGGAGGAGGCGAAGTGGTTTTCTCATGTCTGTGAGGAAGGTCTTGAAGCCATTCAACTC
ACAGATCCAGGAAAAATCAAACGTATTAGAGGAATGGCGTACTCTGTACGTGTGTACCTCAGATGGCGAACCGG
ATTGTGGATTCTGCAAGGAGCATCCTCAACAAGTTCATACCTGATATCTATATTTACACAGATCACATGAAAGGA
GTCAACTCTGGGAAGTCTCCGGGCTTTGGGTTGTCACTGGTTGCTGAGACCACCAGTGGCACCTTCCTCAGTGCT
GAACTGGCCTCCAACCCCCAGGGCCAGGGAGCAGCAGTACTTCAGAGGACCTTGGCAGGAAGTGTGCCCCGGCTG
CTGCTGGAGGAAATCTACAGGGGTGGATGCGTAGACTCGACCAACCAAAGCCTGGCGCTACTACTCATGACCCTT
GGACAGCAGGATGTTTCAAAGTCCTGCTAGGCCCTCTCTCTCCCTACACGATAGAATTTTTGCGGCATTTGAAG
AGCTTTTTCCAGATTATGTTTAAAATTGAAACCAAGCCATGTGGTGAAGAACTCAAGGGTGGGGATAAAGTGCTG
ATGACCTGTGTTGGCATTGGTTTCTCCAACCTTAGCAAGACCCTCAAGTGATAACCATCACAAAGATAAGGCCCCA
ATGCCTACAGACAAAGCAGAAGCTGCCACGGACACCAATGGGACCAAGTCCAAATGGATTAATCCAGGACAGAAT
AGCCACTTGCTTAATTTTCTGTGAAGAAATATCAATATACAAATAAAAGACATCCCTGTAGCATATGGTTTCCAG
CTGTTTCTCCAGTGGCATTGCCATTGCCCAGGAGGGGGCCAGTCACCATGAGAGCTCCCTTGCCCTTACCTGGAGG
AAGAATGTGCCTTCAGGCCACAGTCGTGCTGCTAGAACAGTCTCGTAGCTGCAGTTCAGCTGTGCTTCCTCAGCC
TACTATCATAGGCTTCCTCAGCCCTCTGTCTATATGGCTGTTTTGCAAACCTGTGGAGTCTGTTACTGTTCTTTCT
GCAAGGACTCACCTCCTTGAGCCTTGGGTTTTGTTGTAGGGATTAAATGAGATAATATGAGTGGCAGCTCTTCAT
GAGTCCTGCAGTGCTAAGCAAATGTGAGAAATTGGTGTATTAGACTATTTATCTTTGATCTTCTGAATGGATTGC
TGTCATGGACACGGACACGGATCTTCATCTGGTTTCATTGTATTTATATGTGAGGGATGGATGGCTGCGGGGCTCC
AAGTAAGTTATTGGGATGTTTTTATATCCAGGIGTGCTGTACATTCTTATTTTATTTTACAAATAGCTCTGTGA
TGTAAGTGCTATCTCCATGAGAAAATTCATAAAGGGTGTTTTGTTCCCTTGAAATGTATAATGTAAAGACATTAA
ATCTCCTCATTTA

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FIGURE 2647

CGCCGCAGCTCCAGCGCCGCGCAGCAGCCGCCGCCGCCCTCTCCTTAGTCACTGCCATGACGACCGCGTCCAC
CTCGCAGGTGCGCCAGAACTACCACCAGGACTCAGAGGCCGCCATCAACCGCCAGATCAACCTGGAGCTCTACAC
CTCCTACCTTTACCTGTCCACGTCTTACTACTTTGACCTCGATGATGTGGCTTTGAAGAACTTTGCCAAATACTT
TCTTCACCAATCTCATGAGGAGAGGGAACATGCTGAGAACTGTTGAAGCTGCAGAACCAACGAGGTGGCCGAAT
CCTTCTTCAGGATATCAAGAAACCAGACTGTGATGACTGGGAGAGTGGGCTGAATGCGATGGAGTGTGCACTACA
TTTGGAATAAATGTGTATCAGTCACCACTGGAAGTGCACAAACCGGCCACTGACAAAAATGCCATCAAAGAATG
GGGTGACCACGTGACCAACTTGTGCAAGATGGGAGCACCCGAATCTGGCTTGGCAGAATATCTCTTTGACAAGCA
CTCCCTGGGAGACAGTGATAATGAAAGCTTAAGCCTCAGGCTAATTTCCCCATAGCCGTGGGGTGACTTCCCTGGT
CACCAAGGCAGTGCATGCATGTTGGG

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FIGURE 2648

MTTASTSQVRQNYHQDSEAAINRQINLELYTSYLYLSTSYFFDLDDVALKNFAKYFLHQSHEEREHAEKLLKLQN
QRGGRILLQDIKKPDCDDWESGLNAMECALHLEKNVYQSPLHLHKPATDKNAIKEWGDHVTNLCKMGAPESGLAE
YLFDKHSGLGSDNES

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FIGURE 2649

ATGGCATCCGTTGCAGTTGATCCACAACCGAGTGTGGTGA¹CTCGGGTGGTCAACCTGCCCTTGGTGAGCTCCACG
TATGACCTCATGTCTCAGCCTATCTCAGTACAAAGGACCAGTATCCCTACCTGAAGTCTGTGTGTGAGATGGCA
GAGAACGGTGTGAAGACCATCACCTCCGTGGCCATGACCAGTGCTCTGCCCATCATCCAGAAGCTAGAGCCGCAA
ATTGCAGTTGCCAATACCTATGCCTGTAAGGGGCTAGACAGGATTGAGGAGAGACTGCCTATTCTGAATCAGCCA
TCAACTCAGATTGTTGCCAATGCCAAAGGCGCTGTGACTGGGGCAAAGATGCTGTGACGACTACTGTGACTGGG
GCCAAGGATTCTGTGGCCAGCACGATCACAGGGGTGATGGACAAGACCAAAGGGGCAGTGACTGGCAGTGTGGAG
AAGACCAAGTCTGTGGTCAGTGGCAGCATTAACACAGTCTTGGGGAGTCGGATGATGCAGCTCGTGAGCAGTGGC
GTAGAAAATGCACTCACCAATCAGAGCTGTTGGTAGAACAGTACCTCCCTCTCACTGAGGAAGAACTAGAAAAA
GAAGCAAAAAAAGTTGAAGGATTTGATCTGGTTCAGAAGCCAAGTTATTATGTTAGACTGGGATCCCTGTCTACC
AAGCTTCACTCCCCTGCCTACCAGCAGGCTCTCAGCAGGGTTAAAGAAGCTAAGCAAAAAAGCCAACAGACCATT
TCTCAGCTCCATTCTACTGTTACCTGATTGAATTTGCCAGGAAGAATGTGTATAGTGCCAATCAGAAAATTCAG
GATGCTCAGGATAAGCTCTACCTCTCATGGGTAGAGTGGAAAAGGAGCATTGGATATGATGATACTGATGAGTCC
CACTGTGCTGAGCAATTTGAGTCACGTACTCTTGCAATTGCCCGCAACCTGACTCAGCAGCTCCAGACCACGTGC
CACACCCTCCTGTCCAACATCCAAGGTGTACCACAGAACATCCAAGATCAAGCCAAGCACATGGGGGTGATGGCA
GGCGACATCTACTCAGTGTTCCGCAATGCTGCCTCCTTTAAAGAAGTGTCTGACAGCCTCCTCACTTCTAGCAAG
GGGCAGCTGCAGAAAATGAAGGAATCTTTAGATGACGTGATGGATTATCTTGTTAAACAACACGCCCCCTCAACTGG
CTGGTAGGTCCCTTTTATCCTCAGCTGACTGAGTCTCAGAATGCTCAGGACCAAGGTGCAGAGATGGACAAGAGC
AGCCAGGAGACCCAGCGATCTGAGCATAA²AACTCATTAA

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FIGURE 2650

MASVAVDPQPSVVTRVVNLPLVSSTYDLMSSAYLSTKDQYPYLKSVCEMAENGVKTITSVAMTSALPIIQKLEPQ
IAVANTYACKGLDRIEERLPILNQPSTQIVANAKGAVTGAKDAVTTTGTGAKDSVASTITGVMDKTKGAVTGSVE
KTKSVVSGSINTVLGSRMMQLVSSGVENALTKSELLVEQYLPLTEEELEKEAKKVEGFDLVQKPSYYVRLGSLST
KLHSRAYQQALSRVKEAKQKSQQTISQLHSTVHLIEFARKNVYSANQKIQDAQDKLYLSWVEWKRSIGYDDTDES
HCAEQFESRTLAIARNLTQQLQTTCHTLLSNIQGVQNIQDQAKHMGVMAGDIYSVFRNAASFKEVSDSLLTSSK
GQLQKMKESLDDVMDYLVNNTPLNWLVGPFYPQLTESQNAQDQGAEMDKSSQETQRSEHKTH

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FIGURE 2651

CCTCTTTTCCGTGGCGCCTCGGAGGCGTTTCAGCTGCTTCAAGATGAAGCTGAACATCTCCTTCCCAGCCACTGGC
 TGCCAGAACTCATTGAAGTGGACGATGAACGCAAACCTTCGTACTTTCTATGAGAAGCGTATGGCCACAGAAGTT
 GCTGCTGACGCTCTGGGTGAAGAATGGAAGGGTTATGTGGTCCGAATCAGTGGTGGGAACGACAAACAAGGTTTC
 CCCATGAAGCAGGGTGTCTTGACCCATGGCCGTGTCCGCCTGCTACTGAGTAAGGGGCATTCTGTGTACAGACCA
 AGGAGAACTGGAGAAAGAAAGAGAAAATCAGTTCGTGGTTGCATTGTGGATGCAAATCTGAGCGTTCTCAACTTG
 GTTATTGTAAAAAAGGAGAGAAGGATATTCTGGACTGACTGATACTACAGTGCCTCGCCGCCTGGGCCCCAAA
 AGAGCTAGCAGAATCCGCAAACCTTTCAATCTCTCTAAAGAAGATGATGTCCGCCAGTATGTTGTAAGAAAGCCC
 TTAAATAAAGAAGGTAAGAAACCTAGGACCAAAGCACCCAAGATTCAGCGTCTTGTTACTCCACGTGTCCTGCAG
 CACAAACGGCGGCGTATTGCTCTGAAGAAGCAGCGTACCAAGAAAAATAAAGAAGAGGCTGCAGAATATGCTAAA
 CTTTTGGCCAAGAGAATGAAGGAGGCTAAGGAGAAGCGCCAGGAACAAATTGCGAAGAGACGCAGACTTTCCTCT
 CTGCGAGCTTCTACTTCTAAGTCTGAATCCAGTCAGAAATAAGATTTTTTGAGTAACAAATAAATAAGATCAGAC
 TCTG

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FIGURE 2652

MKLNISFPATGCQKLI EVDDERKLRTFYEKRMATEVAADALGEEWKGYVVRISGGNDKQGFPKQGVLT HGRVRL
LLSKGHSCYRPRRTGERKRKSVRGCIVDANLSVLNLVIVKKGEKDIPGLTDTTVPRRLGPKRASRIRKLFNLSKE
DDVRQYVVRKPLNKEGKKPRTKAPKIQRLVTPRVLQHKRRRIALKKQRTKKNKEEAAEYAKLLAKRMKEAKEKRO
EQIAKRRRLSSLRASTSKSESSQK

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FIGURE 2653

CCTCCCTACGGGCGCCTCCGGCAGCCCTTCCCGCGTGCAGGGCTCAGAGCCGTTCCGAGATCTTGGAGGTCCG
GGTGGGAGTGGGGGTGGGGTGGGGTGGGGTGAAGGTGGGGGGCGGGCGCGCTCAGGGAAGGCGGGTGC

CGCC
TGCGGGGCGGAGATGGGCGAGGGGGCGGTGCGTGGGTCCCAGTCTGCAGTTAAGGGGGCAGGAGTGCGCTGCTCA
CCTCTGGTGCCAAAGGGCGGCGCAGCGGCTGCCGAGCTCGGCCCTGGAGGCGGGCAGAACATGGTGCGCAGGTTC
TTGGTGACCCTCCGGATTTCGGCGCGGTGCGGCCCGCCGCGAGTGAGGGTTTTTCGTGGTTCACATCCCGCGGCTC
ACGGGGGAGTGGGCGAGCGCCAGGGGGCGCCGCGCTGTGGCCCTCGTGCTGATGCTACTGAGGAGCCAGCGTCTA
GGGCGAGCAGCCGCTTCCTAGAAGACCAGGTTCATGATGATGGGCGAGCGCCGAGTGGCGGAGCTGCTGCTGCTCCA
CGGCGCGGAGCCCAACTGCGCCGACCCCGCCACTCTCACCCGACCCGTGCACGACGCTGCCCGGAGGGCTTCCT
GGACACGCTGGTGGTGTCTGCACCGGGCGGGGCGCGGCTGGACGTGCGCGATGCCTGGGGCCGTCTGCCCGTGGA
CCTGGCTGAGGAGCTGGGCCATCGCGATGTGCGACGGTACCTGCGCGCGGCTGCGGGGGGCACCAGAGGCAGTAA
CCATGCCCCGATAGATGCCGCGGAAGGTCCCTCAGACATCCCCGATTGAAAGAACCAGAGAGGCTCTGAGAAACC
TCGGGAAACTTAGATCATCAGTCACCGAAGGTCCTACAGGGCCACAACCTGCCCCCGCCACAACCCACCCCGCTTT
CGTAGTTTTTCATTTAGAAAATAGAGCTTTTAAAAATGTCTGCCTTTTAACGTAGATATATGCCTTCCCCACTA
CCGTAAATGTCCATTTATATCATTTTTTATATATTCTTATAAAAATGTAAAAAGAAAAACACCGCTTCTGCCTT
TTCAGTGTGTTGGAGTTTTCTGGAGTGAGCACTCACGCCCTAAGCGCACATTTCATGTGGGCATTTCTTGCGAGCC
TCGCAGCCTCCGGAAGCTGTGCACTTCATGACAAGCATTTTGTGAAC TAGGGAAGCTCAGGGGGGTACTGGCTT
CTCTTGAGTCACACTGCTAGCAAATGGCAGAACCAAAGCTCAAATAAAAATAAAATAATTTTCATTCACTC

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FIGURE 2654

MGRGRCVGPLQLRGQEWRCSPKGGAAAAELGPGGGENMVRFLVTLRIRACGPPRVRFVHHIPRLTGEW
AAPGAPAAVALVLMLLRSQRLGQQPLPRRPGHDDGQRPSSGAAAAPRGAQLRRPRHSHPTRARRCPGGLPGHAG
GAAPGRGAAGRARCLGPSARGPG

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FIGURE 2655

CCCAACCTGGGGCGACTTCAGGTGTGCCACATTGCTAAGTGCTCGGAGTTAATAGCACCTCCTCCGAGCACTCG
CTCACGGCGTCCCCTTGCTGGAAAGATACCGCGGTCCCTCCAGAGGATTTGAGGGACAGGGTCGGAGGGGGCTC
TTCCGCCAGCACCGGAGGAAGAAAGAGGAGGGGCTGGCTGGTCACCAGAGGGTGGGGCGGACCGCGTGCGCTCGG
CGGCTGCGGAGAGGGGGAGAGCAGGCAGCGGGCGGGGAGCAGCATCGAGCCGGCGGGGAGCAGCATGGA
GCCTTCGGCTGACTGGCTGGCCACGGCCGCGGCCGGGGTGGGTAGAGGAGGTGCGGGCGCTGCTGGAGGGCGG
GGCGCTGCCCAACGCACCGAATAGTTACGGTCGGAGGCCGATCCAGGTCATGATGATGGGCAGCGCCCGAGTGGC
GGAGCTGCTGCTGCTCCACGGCGCGGAGCCCAACTGCGCCGACCCCGCCACTCTCACCCGACCCGTGCACGACGC
TGCCCCGGGAGGGCTTCCTGGACACGCTGGTGGTGTGTCACCGGGCGGGGCGCGGCTGGACGTGCGCGATGCCTG
GGGCCGTCTGCCCCTGGACCTGGCTGAGGAGCTGGGCCATCGCGATGTCGCACGGTACCTGCGCGCGGCTGCGGG
GGGCACCAGAGGCAGTAACCATGCCCCGATAGATGCCGCGGAAGGTCCCTCAGACATCCCCGATTGAAAGAACCA
GAGAGGCTCTGAGAAACCTCGGGAAACTTAGATCATCAGTCACCGAAGGTCCCTACAGGGCCACAACCTGCCCCCGC
CACAACCCACCCCGCTTTCGTAGTTTTCATTTAGAAAATAGAGCTTTTAAAAATGTCCTGCCTTTTAACTAGAT
ATATGCCTTCCCCCACTACCGTAAATGTCCATTTATATCATTTTTTATATATTCTTATAAAAAATGTAAAAAGAA
AAACACCGCTTCTGCCTTTTCACTGTGTTGGAGTTTTCTGGAGTGAGCACTCACGCCCTAAGCGCACATTCATGT
GGGCATTTCTTGCGAGCCTCGCAGCCTCCGGAAGCTGTCGACTTCATGACAAGCATTTTGTGAAC TAGGGAAGCT
CAGGGGGTTACTGGCTTCTCTTGAGTCACACTGCTAGCAAATGGCAGAACCAAAGCTCAAATAAAAAATAAATA
ATTTTCATTCATTCACTC

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FIGURE 2656

MEPAAGSSMEPSADWLATAAARGRVEEV RALLEAGALPNAPNSYGRRP IQVMMG SARVAELLLLHGAEPNCADP
ATLTRPVHDAAREGF LDTLVVLHRAGARLDVRDAWGRLPVDLAEELGHRDVARYLRAAAGGTRGSNHARIDAAEG
PSDIPD

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FIGURE 2657

TGTGTGGGGGTCTGCTTGGCGGTGAGGGGGCTCTACACAAGCTTCCTTTCCGTGATGCCGGCCCCACCCTGGCT
CTGACCATTCTGTTCTCTCTGGCAGGTCATGATGATGGGCAGCGCCCGAGTGGCGGAGCTGCTGCTGCTCCACGG
CGCGGAGCCCAACTGCGCCGACCCCGCCACTCTCACCCGACCCGTGCACGACGCTGCCCGGGAGGGCTTCCTGGA
CACGCTGGTGGTGTGTCACCGGGCCGGGGCGCGGTGGACGTGCGCGATGCCTGGGGCCGTCTGCCCGTGGACCT
GGCTGAGGAGCTGGGCCATCGCGATGTCGCACGGTACCTGCGCGCGGTGCGGGGGGCACCAGAGGCAGTAACCA
TGCCCGCATAGATGCCGCGGAAGGTCCCTCAGACATCCCCGATTGAAAGAACCAGAGAGGCTCTGAGAAACCTCG
GGAAACTTAGATCATCAGTCACCGAAGGTCTACAGGGCCACAAGTCCCCCGCCACAACCCACCCCGCTTTCGT
AGTTTTCATTTAGAAAATAGAGCTTTTAAAAATGTCCTGCCTTTTAAACGTAGATATAAGCCTTCCCCACTACCG
TAAATGTCCATTTATATCATTTTTTATATATTCTTATAAAAAATGTAAAAAAGAAAAACACCGCTTCTGCCTTTTC
ACTGTGTTGGAGTTTTCTGGAGTGAGCACTCACGCCCTAAGCGCACATTTCATGTGGGCATTTCTTGCGAGCCTCG
CAGCCTCCGGAAGCTGTCGACTTCATGACAAGCATTTTGTGAACTAGGGAAGCTCAGGGGGGTACTGGCTTCTC
TTGAGTCACACTGCTAGCAAATGGCAGAACCAAAGCTCAAATAAAAAATAAAATAATTTTCATTCACTC

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FIGURE 2658

MMGSGARVAELLLLHGAEPNCADPATLTRPVHDAAREGFLDTLVVLHRAGARLDVRDAWGRLPVDLAEELGHRDV
ARYLRAAAGGTRGSNHARIDAAEGPSDIPD

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FIGURE 2659

GCAGTAGTGCTAGCGGCTTCACGGTTCGGTCCTCGGACCCGGCAGCCGCCACTGGTGCTGAGCTGTTAGGAAGCC
CCTATCGGCGAGCTCATTGGAGCTTGAACCCATTGTCACCCCTCCGACTCACCGGCAAAAAAAAAAAAAAAAAAAT
GGTTGAAGCAGATTGCCAGGAAAGCCGTTCACTGGTGGGCTTAACACGGAAACAAATGAGAAAGCTCTTGAAGC
AGTATTTGGCAAATATGGACGAATAGTGGAAGTACTCTTGGTGAAAGACCATGAAACCAACAAATCAGGAGGATT
TGCTTTTGTACCTTTGAAAGCCCAGCAGATGCTAAGGATGCAGCCAGAGACATGAATGGAAAGTCATTAGATGG
AAAAGCCATCGAGGTGGAACAAGCCAACAAACCATCATTTGAAAGTGGTAGACGTGGACCGCCTCCACCTCCAAG
AAGTAGAGGCCCTCCAAGAGGTCTTAGAGGTGGAAGAGGAGGAAGTGGAGGAACAAGGGGACCTCCCTCACGGGG
AGGACACATGGATGACGGTGGATATTCCATGAATTTTAACATGAGTTCTTCCAGGGGACCACATCCAGTAAAAAG
AGGACCACCACCAAGAAGTGGGAGTCCTCCTTCTAAGAGATCTGCACCTTCAGGACCAGTTCGCAGTAGCAGTGA
AATGGGAGGAAGAGCTCCTGTATCACGTGGAAGAGATAGTTACGGAGGTCCACCTCGAAGGGAAGTGTGCCCTC
TTGTAGAAATGATTATTTGTCCCAAGAGATGATGGGTATTCTACTAAAGACAGCTATTCAAGCAGAGATTACCC
AAGTTCATGATACTAGAGCTTATGCACCACCACCACGAGATTATACTTACCGTGATTATGGTCATTCCAGTTC
ACGTGTTGACTATCCATAAAGAGGCTATAGCGATAGAGATAGATATGGTCGTGATCATGACTATTCAGATCATCC
AGGTGGAGGTTCTACAGAGATTCAATATGAGAGTTATGGTAACTCACGTAGTGCTCCACCTACACGAGGGCCCCC
ACCATCTTATGGTGGAAGCAGTCGCTATGATGATTACAGCAGCTCATGTGACGGATATGGTGGAAGTCGAGACAG
TACTCAAGCAGCCGAAGTGATCTCTACTCAAGTGGTCGTGATCGGGTTGGCAGACAAGAAAGAGGGGCTTACCCC
TTCTATGGAAAGAGGATAACCTCCTCCACGTGATTCTACAGCAGTTCAAGTGCAGGAGCACCAGCGGTGGTGGC
TGTGGAGGAAGCCGATCTGATAGAGGGGGAGGTAGAAGCAGATACTAGAAACAAACAAAACCTTTGGACCAAATC
CCAGTTCAAAGAAACAAAAAGTGAAGCTATTCTATCATAACTACCCAAGGACTACTAAAAGGAAAAATTGTGTT
ACTTTTTAAAAAATTCCTGTAAAGTTCCCCCTCCATAATTTTTATGTTCTTGTGAGGAGAAAAGTAAACATGTTT
AATTTTATTTTGACTTTTGCATTGCTTTTCAACAAGCAAACGTTAAATGTGTTAAGACTTGTACTGGTGTGTAA
CTTTCCAAGTAAAAGTATCCCTAAAGGCCACTTCCTATCTGATTTTTCCAGTAAATGAGGCAGGCAATTCTAAG
ATCTTCCACAAAACATCTAGCCATCTAAAATGGAGAGATGAATCATTCTACCTATACAAACAAGCTAGCTATTAG
AGGGTGGTTGGGGTATGCTACTCATAAGATTTCAAGGTGTCTTCCAACCTGAAATCTCAATGTTTTTCAGTATGAAA
AACCTGAAATCACATGCCTTTGTAAAGGAAAGTGCTATTACCCAGTAAACCCAAAAAAGCAAATGGATGATGCTG
GCCATTTGCCTTTCTGACATTTCTTGGGAATCTGCAAGAACCTCCCTTTCCCCCTCCCCCAATAAGACCATT
AAGTGTGTGTTAAACAACCTACAGAATACTAAATAAAAAGTTTGCCAAAACC

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FIGURE 2660

CGGTAAC TACCCCGGCTGCGCACAGCTCGGCGCTCCTTCCCGCTCCCTCACACACCGCCTCAGCCCGCACCGGCA
GTAGAAGATGGTGAAAGAAACAACCTTACTACGATGTTTTGGGGGTCAAACCCAATGCTACTCAGGAAGAATTGAA
AAAGGCTTATAGGAACTGGCCTTGAAGTACCATCCTGATAAGAACCCTAATGAAGGAGAGAAGTTTAAACAGAT
TTCTCAAGCTTACGAAGTTCTCTCTGATGCAAAGAAAAGGGAATTATATGACAAAGGAGGAGAACAGGCAATTAA
AGAGGGTGGAGCAGGTGGCGGTTTTGGCTCCCCATGGACATCTTTGATATGTTTTTTGGAGGAGGAGGAAGGAT
GCAGAGAGAAAGGAGAGGTAAAAATGTTGTACATCAGCTCTCAGTAACCCTAGAAGACTTATATAATGGTGCAAC
AAGAAAAC TGGCTCTGCAAAGAATGTGATTTGTGACAAATGTGAAGGTAGAGGAGGTAAAGAAAGGAGCAGTAGA
GTGCTGTCCCAATTGCCGAGGTACTGGAATGCAAATAAGAATTCATCAGATAGGACCTGGAATGGTTCAGCAAAT
TCAGTCTGTGTGCATGGAGTGCCAGGGCCATGGGGAGCGGATCAGTCCTAAAGATAGATGTAAAAGCTGCAACGG
AAGGAAGATAGTTCGAGAGAAGAAAATTTTAGAAGTTCATATTGACAAAGGCATGAAAGATGGCCAGAAGATAAC
ATTCCATGGTGAAGGAGACCAAGAACCAGGACTGGAGCCAGGCGATATTATCATTGTGTAGATCAGAAGGACCA
TGCTGTTTTTACTCGACGAGGAGAAGACCTTTTCATGTGTATGGACATACAGCTCGTTGAAGCACTGTGTGGCTT
CCAGAAGCCAATATCTACTCTTGACAACCGAACCATCGTCATCACCTCTCATCCAGGTCAGATTGTCAAGCATGG
AGATATCAAGTGTGTACTAAATGAAGGCATGCCAATTTATCGTAGACCATATGAAAAGGGTCGCCTAATCATCGA
ATTTAAGGTAACTTTTCTGAGAATGGCTTTCTCTCTCCTGATAAACTGTCTTTGCTGGAAAACTCCTACCCGA
GAGGAAGGAAGTGGAAGAGACTGATGAGATGGACCAAGTAGAACTGGTGGACTTTGATCCAAATCAGGAAAGACG
GCGCCACTACAATGGAGAAGCATATGAGGATGATGAACATCATCCCAGAGGTGGTGTTCAGTGTGACACCTCTTA
ATGGCCAGTGAATAACACTCACTGCTGGCATTTAATGTGCAGTAGTGAATGAGTGAAGGACTGTAATCATAATAT
GCTCACTACTTGCTCTTGTTTTTGTGTTTTAATAAACTATAGTAGTGTATAAAAAGTTAAATGAAGAATAAACGCA
AATATAAAAGCTC

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FIGURE 2661

MVKETTYDVLGVKPNATQEELKKAYRKLALKYHPDKNPNEGEKFKQISQAYEVLSDAKKRELYDKGGEQAIKEG
GAGGGFGSPMDIFDMFFGGGGRMQRERRGKNVVHQLSVTLEDLYNGATRKLALQKNVICDKCEGRGGKKGAVECC
PNCRGTMQIRIHQIGPGMVQQIQSVCMECQGHGERISPKDRCKSCNGRKIVREKKILEVHIDKGMKDGQKITFH
GEGDQEPGLEPGDIIIVLDQKDHAVFTRGEDLFMCMDIQLVEALCGFQKPISTLDNRTIVITSHPGQIVKHGDI
KCVLNEGMPIYRRPYEKGRLIIEFKVNFPENGFLSPDKLSLLEKLLPERKEVEETDEMDQVELVDFDPNQERRRH
YNGEAYEDDEHHPRGGVQCQTS

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FIGURE 2662

TAGTCGGGCGGGGTTGTGAGACGCCGCGCTCAGCTTCCATCGCTGGGCGGTCAACAAGTGCGGGCCTGGCTCAGC
GCGGGGGGGCGCGGAGACCGCGAGGCGACCGGGAGCGGCTGGGTTCCCGGCTGCGCGCCCTTCGGCCAGGCCGGG
AGCCGCGCCAGTCGGAGCCCCCGGCCAGCGTGGTCCGCCTCCCTCTCGGCGTCCACCTGCCCGGAGTACTGCCA
GCGGGCATGACCGACCCACCAGGGGCGCCGCCGCGGCGCTCGCAGGCCGCGGATGAAGAAGAAAACCCGGCGCC
GCTCGACCCGGAGCGAGGAGTTGACCCGGAGCGAGGAGTTGACCCTGAGTGAGGAAGCGACCTGGAGTGAAGAGG
CGACCCAGAGTGAGGAGGCGACCCAGGGCGAAGAGATGAATCGGAGCCAGGAGGTGACCCGGGACGAGGAGTCGA
CCCGGAGCGAGGAGGTGACCAGGGAGGAAATGGCGGCAGCTGGGCTCACCCTGACTGTCACCCACAGCAATGAGA
AGCAGACCTTCATGTTACCTCCCAGCAGGGCAGCAGTGAACCAAGTTGTCCAAGACCTGGCCCAGGTTGTTGAAG
AGGTCATAGGGGTTCCACAGTCTTTTCAGAACTCATATTTAAGGGAAAATCTCTGAAGGAAATGGAAACACCGT
TGTCAGCACTTGGAATACAAGATGGTTGCCGGGT CATGTTAATTGGGAAAAAGAACAGTCCACAGGAAGAGGTTG
AACTAAAGAAGTTGAAACATTTGGAGAAGTCTGTGGAGAAGATAGCTGACCAGCTGGAAGAGTTGAATAAAGAGC
TTACTGGAATCCAGCAGGGTTTTCTGCCCAAGGATTTGCAAGCTGAAGCTCTCTGCAAACCTTGATAGGAGAGTAA
AAGCCACAATAGAGCAGTTTATGAAGATCTTGGAGGAGATTGACACACTGATCCTGCCAGAAAATTTCAAAGACA
GTAGATTGAAAAGGAAAGGCTTGGTAAAAAAGGTT CAGGCATTCTAGCCGAGTGTGACACAGTGGAGCAGAACA
TCTGCCAGGAGACTGAGCGGCTGCAGTCTACAACTTTGCCCTGGCCGAGTGAAGGTGTAGCAGAAAAAGGCTGTG
CTGCCCTGAAGAATGGCGCCACCAGCTCTGCCGTCTCTGGATCGGAATTTACCTGATTTCTTCAGGGCTGCTGGG
GGCAACTGGCCATTTGCCAATTTTCTACTCTCACACTGGTTCTCAATGAAAAATAGTGTCTTTGTGATTTGAGT
AAAGCTCCTATTCTGTTTTTCACAAAAA

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FIGURE 2663

LAQRRGGARRPRGDRERLGSRLRALRPGREPRQSEPPAQRGPPPSRRPPARSTASGHDRPTRGAAAGARRPRMKKK
TRRRSTRSEELTRSEELTLSEEATWSEEATQSEEATQGEEMNRSQEVTRDEESTRSEEVTREEMAAAGLTVTVTH
SNEKHDLHVTSQQGSSEPVVQDLAQVVEEVIGVPQSFQKLIFKGKSLKEMETPLSALGIQDGCVRVMLIGKKNSPQ
EEVELKKLKHLEKSVEKIADQLEELNKELTGIQQGFLPKDLQAEALCKLDRRVKATIEQFMKILEEIDTLILPEN
FKDSRLKRKGLVKKVQAF LAECDTVEQNICQETERLQSTNFALAE.

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FIGURE 2664

GGGGAAGTCGAGGCGGGAGTGACTCTGCTTCCGTTTCTGGTTTTGCTCTAGTGTTTGGGTTTCTTCGCGGCTGCT
CAAGATGAACCGACTCTTCGGGAAAGCGAAACCCAAGGCTCCGCCGCCAGCCTGACTGGCTGCATTGGCACGGT
GGACAGTAGAGCAGAATCCATTGACAAGAAGATTTCTCGATTGGATGCTGAGCTAGTGAAGTATAAGGATCAGAT
CAAGAAGATGAGAGAGGGTCTTGCAAAGAATATGGTCAAGCAGAAAGCCTTGCGAGTTTTAAAGCAAAAGAGGAT
GTATGAGCAGCAGCGGGACAATCTTGCCCAACAGTCATTCAACATGGAACAAGCCAATTATACCATCCAGTCTTT
GAAGGACACCAAGACCACGGTTGATGCTATGAAACTGGGAGTAAAGGAAATGAAGAAGGCATACAAGCAAGTGAA
GATCGACCAGATTGAGGATTTACAAGACCAGCTAGAGGATATGATGGAAGATGCAAATGAAATCCAAGAAGCACT
GAGTCGCAGTTATGGCACCCCAAGACTGGATGAAGATGATTTAGAAGCAGAGTTGGATGCACTAGGTGATGAGCT
TCTGGCTGATGAAGACAGTTCTTATTTGGATGAGGCAGCATCTGCACCTGCAATTCAGAAAGGTGTTCCCACTGA
TACAAAAACAAGGATGGAGTTCTGGTGGATGAATTTGGATTGCCACAGATCCCTGCTTCAATAGATTTGCATCAT
TCAAGCATATCTTGTAACCAACACATATTATGGGACTAGGAAATATTTATCTTTCCAAATTTGCCATAACAGA
TTTAGGTTTCTTTCTTTCTTTGAAGGAAAGTTTAATTACATTGCTCTTTTATTTTTTCCATTAAAGAGACTCATT
GCTTGGGAAATGCTTTCTTCGTACTAAAATTTGATTCTTTTTTTCTTATGAAAAACGAACTCAGTTTAAAAGTA
TTTTTAGCTCGTATGACTTGTTTTTCATTCATTAATAATAATTTGAAATAAACTAAGGAAATGGAATCTTAAAG
TCTATGACAGTGTAACCTCTACAGTCTCAAAATGACCTGATAAATTGATAAGACAAAGATGAGATTATTGGGGCTG
TTCATATTATGATTGAGAATCATTTTCTATTGTGGTATTATAGGTTGGTTAAAGTGATGGCCTTTTGATGGGTT
TTGTTGTGCTTGTGAACAAGTCGTTACTGTGTCCATTATTGGAATGGAATTATCACTACTGTATCATGAGTGGG
TATTTTGATTCTATGGTTCCCTCAGTATTACATCTTGACTTGTAATCAATTATGAATATTTCTTGATATTTAATG
TATAGGACATTTATTTATACTCAATAAATATTTTTCAAAGGAAAAAAAAAAAAAAAAATCAAAAAAAAAAAAAAAAA
AAAAAAAAA

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FIGURE 2665

MNRLFGKAKPKAPPPSLTGCIGTVDSRAESIDKKISRLDAELVKYKDQIKKMREGPAKNMVKQKALRVLKQKRM
EQQRDNLAQQSFNMEQANYTIQSLKDTKTITVDAMKLGVKEMKKAYKQVKIDQIEDLQDQLEDMMEDANEIQEALS
RSYGTPELDEDDLEAELDALGDELLADEDSSYLDEAASAPAIPEGVPTDTKNKDGVLVDEFGLPQIPAS

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FIGURE 2666

TGCTCGCTGCGCCACCGCCTCCCGCCACCCCTGCCCGCCGACAGCGCCGCGCCTGCCCCGCCATGGGTCGACA
GAAGGAGCTGGTGTCCCGCTGCGGGGAGATGCTCCACATCCGCTACCGGCTGCTCCGACAGGCGCTGGCCGAGTG
CCTGGGGACCTCATCCTGGTGATGTTTGGCTGTGGCTCCGTGGCCAGGTTGTGCTCAGCCGGGGCACCACGG
TGGTTTCCTCACCATCAACCTGGCCTTTGGCTTTGCTGTCACTCTGGGCATCCTCATCGCTGGCCAGGTCTCTGG
GGCCACCTGAACCTGCCGTGACCTTTGCCATGTGCTTCCTGGCTCGTGAGCCCTGGATCAAGCTGCCCATCTA
CACCTGGCACAGACGCTGGGAGCCTTCTTGGGTGCTGGAATAGTTTTTGGGCTGTATTATGATGCAATCTGGCA
CTTCGCCGACAACCAGCTTTTTGTTTCGGGCCCCAATGGCACAGCCGGCATCTTTGCTACCTACCCCTCTGGACA
CTTGATATGATCAATGGCTTCTTTGACCAGTTCATAGGCACAGCCTCCCTTATCGTGTGTGTGTGCTGGCCATTGT
TGACCCCTACAACAACCCCGTCCCCGAGGCCTGGAGGCCTTACCCTGGGCCTGGTGGTCCTGGTCATTGGCAC
CTCCATGGGCTTCAACTCCGGCTATGCCGTCAACCCTGCCCGGGACTTTGGCCCCGCCTTTTTACAGCCCTTGC
GGGCTGGGGCTCTGCAGTCTTCACGACCGGCCAGCATTGGTGGTGGGTGCCATCGTGTCCCCACTCCTGGGCTC
CATTGCGGGTGCTTCGTGTACCAGCTGATGATCGGCTGCCACCTGGAGCAGCCCCACCCTCCAACGAGGAAGA
GAATGTGAAGCTGGCCCATGTGAAGCACAAGGAGCAGATCTGAGTGGGCAGGGGCCATCTCCCCACTCCGCTGCC
CTGGCCTTGAGCATCCACTGACTGTCCAAGGGCCACTCCCAAGAAGCCCCCTTCACGATCCACCCTTTCAGGCTA
AGGAGCTCCCTATCTACCCTCACCCCACGAGACAGCCCTTCAGGATTTCCACTGGACCTTGCCCAAAATAGCACC
TTAGGCCACTGCCCTAAGCTGGGGTGGAACCGGAATTTGGGTCAATACATCCTTTTGTCTCCCAAGGGAAGAGA
ATGGGCAGCAGGTATGTGTGTGTGTGCATGTGTGTGCATGTGTGTGCATGTGTGTGCAGGGGTGTGTGTGTGG
GGGGGTTCAGATATTCAGGGCAAGGGACCAGTCGGAAGGGATTCTGGCTATTGGGGGAGCCCAGAGACAGGG
GAAGGCAGCCTGTCCATCTGTGCATAAGGAGAGGAAAGTTCCAGGGTGTGTATGTTTCAGGGGCTTCACATGGAG
GAGCTGCAGATAGATATGTGTTTCT

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FIGURE 2667

MGRQKELVSRCGEMLHIRYRLRQALAECLGTLILVMFGCGSVAQVVLSRGTHGGFLTINLAFGFAVTLGILIAG
QVSGAHLNPAVTFAMCFLAREPWIKLPIYTLAGAFLGAGIVFGLYYDAIWHFADNQLFVSGPNGTAGIFATY
PSGHLDMINGFFDQFIGTASLIVCVLAIVDPYNNPVPRGLEAFVGLVVLVIGTSMGFNSGYAVNPARDFGPRLF
TALAGWGSVFTTGQHWWVPVIVSPLLGSVAGVFVYQLMIGCHLEQPPPSNEEENVKLAHVKHKEQI

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FIGURE 2668

GGCACGAGGGAGGCGGCGGCTCCAGCCGGCGCGCGGAGGCTCGGCGGTGGGATCCGGCGGGCGGTGCTAGCTC
CGCGCTCCCTGCCTCGCTCGCTGCCGGGGGCGGTGCGAAGGCGCGGCGGAAGCCCGGGTGGCCCCGAGGGCGCGA
TGGCTGCTCCTGTCCCGTGGGCCTGCTGTGCTGTGCTTGCCGCGCGCGCGCAGTTGTCTACGCCCAGAGACACA
GTCCACAGGAGGACCCCCATGTGCAGTACGAGCGCCTGGGCTCTGACGTGACACTGCCATGTGGGACAGCAAAC
GGGATGCTGCGGTGACGTGGCGGGTAAATGGGACAGACCTGGCCCCCTGACCTGCTCAACGGCTCTCAGCTGGTGC
TCCATGGCCTGGAACCTGGGCCACAGTGGCCTCTACGCCTGCTTCCACCGTGACTCCTGGCACCTGCGCCACCAAG
TCCTGCTGCATGTGGGCTTGCCGCGCGGGGAGCCTGTGCTCAGCTGCCGCTCCAACACTTACCCCAAGGGCTTCT
ACTGCAGCTGGCATCTGCCCCACCCACCTACATTCCCAACACCTTCAATGTGACTGTGCTGCATGGCTCCAAAA
TTATGGTCTGTGAGAAGGACCCAGCCCTCAAGAACCGCTGCCACATTCGCTACATGCACCTGTTCTCCACCATCA
AGTACAAGGTCTCCATAAGTGTGAGCAATGCCCTGGGCCACAATGCCACAGCTATCACCTTTGACGAGTTCACCA
TTGTGAAGCCTGATCCTCCAGAAAATGTGGTAGCCCGGCCAGTGCCAGCAACCCTCGCCGGCTGGAGGTGACGT
GGCAGACCCCTCGACCTGGCCTGACCCTGAGTCTTTTCCTCTCAAGTTCTTTCTGCGCTACCGACCCCTCATCC
TGGACCAAGTGGCAGCATGTGGAGCTGTCCGACGGCACAGCACACACCATCACAGATGCCTACGCCGGGAAGGAGT
ACATTATCCAGGTGGCAGCCAAGGACAATGAGATTGGGACATGGAGTGACTGGAGCGTAGCCGCCACGCTACGC
CCTGGACTGAGGAACCGCGACACCTCACCACGGAGGCCAGGCTGCGGAGACCACGACCAGCACCACAGCTCCC
TGGACCCCCACCTACCACGAAGATCTGTGACCTTGGGGAGCTGGGCAGCGGCGGGGGACCTCGGCACCCTTCT
TGGTCAGCGTCCCCATCACTCTGGCCCTGGCTGCCGCTGCCGCCACTGCCAGCAGTCTCTTGATCTTGAGCCCCGGC
ACCCCATGAGGACATGCAGAGCACCTGCAGAGGAGCAGGAGGCCGGAGCTGAGCCTGCAGACCCCGGTTTCTATT
TTGCACACGGGCAGGAGGACCTTTTGCAATTCTCTTCAGACACAATTTGTGGAGACCCCGGCGGGCCCCGGGCTGC
CGCCCCCAGCCCTGCCGCACCAAGCTGGCCCTCCTTCCCTCCCTCAGGGGAGGTGGGCCATGCAGCTAACCCACC
CACCAAAGACCCCTCACCTGGCCCTTGGGCTGGACCTCCAATGCCAGCGACTCCAGGAGCCCTTGGGGGA
CGTGAGGGGAGCCTCTCACATCCGATTTCTCCTCCTGCCCCAGCCTCCTGTCTATCCCAGGGTCTCTGTTGCCAC
CATCAGATTATAAGCTCCTGATGCTGGGGGGGCCAGCCATCCCCCTCCCCCAGCACCCACAATTTTCAGTCCC
CTCCCCCTCTGCCCTGTTTTGTATACCCCTCCCCTGACCTGCTCCTATCCCACAGTATTTAATGCCCTGTCAGTC
CCTTCTAGTCTGACTCAATGGTAACCTGCTGTATTTGAATTTTTATAGATGTATATACAGGGTGGGGGGAGTGG
CGGTTCTCATTAACGTCACCATTTATGAAAAAAAAAAAAAAAAAAAA

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FIGURE 2669

MAAPVPWACCAVLAAAAVVYAQRHSPQEAPHVQYERLGSDVTLPCGTANWDAAVTWRVNGTDLAPDLLNGSQLV
LHGLELGHSGLYACFHRDSWHLRHQVLLHVGLPPREPVLSCRSNTYPKGFYCSWHLPTPTYIPNTFNVTVLHGSK
IMVCEKDPALKNRCHIRYMHLESTIKYKVISVSNALGHNATAITFDEFTIVKPDPPENVVARPVPSNPRRLEVT
WQTPSTWPDPESEFPLKFFLRYPRLILDQWQHVELSDGTAHTITDAYAGKEYIIQVAAKDNEIGTWSWVAHAHAT
PWTEEPRLTTEAQAAETTTSTTSSLAPPPTTKICDPGELGSGGGPSAPFLVSPITLALAAAAATASSLLI

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FIGURE 2670

CTCCGAGGCCGTGAGCGCAAAGCCTCAGGCCCGGCTCCCTCCTGAGCTGCGCCGTGCCAGGCCGCCCGCCGGGA
TGCAGTGGGCGGTGGGCCGGCGGTGGGCGTGGGCCGCGCTGCTCCTGGCTGTCGCAGCGGTGCTGACCCAGGTG
TCTGGCTCTGGCTGGGTACGCAGAGCTTCGTCTTCCAGCGCGAAGAGATAGCGCAGTTGGCGCGGCAGTACGCTG
GGCTGGACCACGAGCTGGCCTTCTCTCGTCTGATCGTGGAGCTGCGGCGGCTGCACCCAGGCCACGTGCTGCCCG
ACGAGGAGCTGCAGTGGGTGTTTCGTGAATGCGGGTGGCTGGATGGGCGCCATGTGCCTTCTGCACGCCTCGCTGT
CCGAGTATGTGCTGCTCTTCGGCACCGCCTTGGGCTCCCGCGGCCACTCGGGGCGCTACTGGGCTGAGATCTCGG
ATACCATCATCTCTGGCACCTTCCACCACTGGAGAGAGGGCACCACCAAAGTGAGGTCTTCTACCCAGGGGAGA
CGGTAGTACACGGGCCTGGTGAGGCAACAGCTGTGGAGTGGGGGCCAAACACATGGATGGTGGAGTACGGCCGGG
GCGTCATCCCATCCACCCTGGCCTTCGCGCTGGCCGACACTGTCTTCAGCACCCAGGACTTCCTCACCCCTCTTCT
ATACTCTTCGCTCCTATGCTCGGGGCCTCCGGCTTGAGCTCACCACCTACCTCTTTGGCCAGGACCCTTGACCAG
CCAGGCCTGAAGGAAGACCTGCGGATGGACAGGAGCGGGCAGCCCGCACATATCCACTTGCTGGAGCCCATGTTT
ACAGACAGGGACATACACCATGCAGATCCTGAGTTCCTGCTGTATGAGCAGGGATATCCATGCTTATGTATCCAA
ACACAGAGACCCATGGGAACAAATGAGACACATATAGATACTGAGACCTGTGTGTACAGTAGGACCATGCACTCA
CACCCATCTGGAGAGGGAGCCCCCGGTATACCAAGGGAGCCAGTTGTGTTTCAGACACACACATCACAGCTTGACT
CACTAACTGAGGCCTTTCCATAGCTCCACAGCTTCCCACCTCCTCCCCACCAAACCGGGTTCTAGAGTTAAGGA
TGGGGGAGGGTATTATACTGCCTCAGTCTGACTCCTCAACCCAGCAGCAATTTGAGGGGATGAGGGGGAAGAGGA
GCTGCCTTTTGGAGGCCCCCTTCACCTGCAGCTATGATGCCCTTCCCCTTCTCCCCTGTCTCACCATATGCCTT
ATCCCCATTCTACTCCCCTGCTATGCAAGTGCCCTGTGGCTTGTCCCCAACCCCTCAGCAACAAAGCTCAGCT
GGGGAACGAGAGTAATTTGAAGAATGCTTGAAGTCAGCGTCTTCCATTCCAGAAAGACCCCCATTCTTCCTTTGG
GGGTATGATGTGGAAGCTGGTTTCAGCCCAGGACCCACCACTGAGGAGAGGATCTAGACAGGTGGGCCTAATTCC
AAGGGGCCCTTCTTGCCCTGGAGAAGGCCTTTTACACACACACAACACATACACACACACACACACATATCAC
AGTTTTCACACAGCCCCCTGCTGCATTCTCTGTCCATCTGTCTGTTTCTATTATAAAGATTTGTTGATCTGTTCC

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FIGURE 2671

MQWAVGRRWAWAALLLAVAAVL TQVVWLWLGTQSFVFQREEIAQLARQYAGLDHELAFSRLIVELRRLHPGHVLP
DEELQWVFVNAGGWMGAMCLLHASLSEYVLLFGTALGSRGHSGRYWAEISDTIISGTFHQWREGTTKSEVFYPGE
TVVHGPGEATAVEWGPNTWMVEYGRGVIPSTLAFALADTVFSTQDFLTFLFYTLRSYARGRLRLTTLTYLFGQDP

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FIGURE 2672

GATGATATGGCAGCCTGCATGAAGTCTGTAAGTGAAGGAGCTTAATTATCCAATGAGGAGAGGAATCTTCTC
TCAGTTGCTTATAAAAAATGTTGTAGGAGCCCGTAGGTCATCTTGGAGCATCGTCTCAAGTATTGAACAAAAGACA
GAAGGTGCTGAGAAAAAACAGCAGATGGCTCAAGAATACAGAGAGAAAACTGAGACCTAGCTAAGAGATAGCTG
CAATGATGTACTGTCCCTTTTGGAAAAGTTCTTGATCCCCAGTGCTTCACAAGCGAGAGCAAATCTTCTATTTG
AAAATGAAAGGAGATCACTACCATTACTTGGCTGAGGTTGCCGCTGGTGATGATAAGAAAGGGACTGTGGATCAG
TCACAACAAGCACACCAAGAAGCTTTTGAAATCAGCAAAAAGGAAATGCAACCAACATATCCTATCAGACTGGGT
CTGGCCCTTAACCTTCTCCGTGTTCTATTATGACGTTCTGAATTCAGAGAAAAGCCTGCTCTCTTGCAAAGACA
GCTTTTGATGAAGCCATTGCTGAACCTGATACATTAAGTGAAGAGTCATCAAAGACAGCACACTAATAATGCAA
TTACTGAGAGACAACCTTGACATTGTGGTTTTTATGTTAATATTAGGGGAGTAGAGCCAGTTAACATTTAGGGAG
TTATCTGTTTTTCATCTTGAGGTGGCCAATATGGGGATGTGGAATTTTTATACAAGTTATTAATGTTTGGCATAGT
ACTTTTGGTACATTGTGGCTT

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FIGURE 2673

CTGCCACTGCCACCTCGCGGATCAGGAGCCAGCGTTGTTGCCCCGACGCCTCGCTGCCGGTGGGAGGAAGCGAGA
GGGAAGCCGCTTGCGGGTTTGTGCGCGCTGCTCGCCCACCGCCTGGAAGAGCCGAGCCCCGGCCAGTCGGTCGC
TTGCCACCGCTCGTAGCCGTTACCCGCGGGCCGCCACAGCCGCCGGCCGGGAGAGGCGCGGCCATGGCTTCTGG
AGCCGATTCAAAGGTGATGACCTATCAACAGCCATTCTCAAACAGAAGAACCCTCCCAATCGGTTAATTGTTGA
TGAAGCCATCAATGAGGACAACAGTGTGGTGTCTTGTCCCAGCCCAAGATGGATGAATTGCAGTTGTTCCGAGG
TGACACAGTGTGTGCTGAAAGGAAAGAAGAGACGAGAAGCTGTTTGATCGTCCTTTCTGATGATACTTGTCTGA
TGAGAAGATTCCGGATGAATAGAGTTGTTTCGGAATAACCTTCGTGTACGCCTAGGGGATGTCATCAGCATCCAGCC
ATGCCCTGATGTGAAGTACGGCAAACGTATCCATGTGCTGCCCATTTGATGACACAGTGGAAGGCATTACTGGTAA
TCTCTTCGAGGTATACCTTAAGCCGTACTTCTTGAAGCGTATCGACCCATCCGGAAGGAGACATTTTCTTGT
CCGTGGTGGGATGCGTGCTGTGGAGTTCAAAGTGGTGGAAACAGATCCTAGCCCTTATTGCATTGTTGCTCCAGA
CACAGTGATCCACTGCGAAGGGGAGCCTATCAAACGAGAGGATGAGGAAGAGTCCTTGAATGAAGTAGGGTATGA
TGACATTGGTGGCTGCAGGAAGCAGCTAGCTCAGATAAAGGAGATGGTGGAACTGCCCTGAGACATCCTGCCCT
CTTTAAGGCAATTGGTGTGAAGCCTCCTAGAGGAATCCTGCTTTACGGACCTCCTGGAACAGGAAAGACCCTGAT
TGCTCGAGCTGTAGCAAATGAGACTGGAGCCTTCTTCTTCTTGATCAATGGTCTGAGATCATGAGCAAATTGGC
TGGTGAGTCTGAGAGCAACCTTCGTAAAGCCTTTGAGGAGGCTGAGAAGAATGCTCCTGCCATCATCTTCATTGA
TGAGCTAGATGCCATCGCTCCCAAAGAGAGAAAACCTCATGGCGAGGTGGAGCGGCGCATTTGTATCACAGTTGTT
GACCCTCATGGATGGCCTAAAGCAGAGGGCACATGTGATTGTTATGGCAGCAACCAACAGACCCAACAGCATTGA
CCCAGCTCTACGGCGATTTGGTGCCTTTGACAGGGAGGTAGATATTGGAATTCCTGATGCTACAGGACGCTTAGA
GATTCTTCAGATCCATACCAAGAACATGAAGCTGGCAGATGATGTGGACCTGGAACAGGTAGCCAATGAGACTCA
CGGGCATGTGGGTGCTGACTTAGCAGCCCTGTGCTCAGAGGCTGCTCTGCAAGCCATCCGCAAGAAGATGGATCT
CATTGACCTAGAGGATGAGACCATTGATGCCGAGGTGATGAACCTCTCTAGCAGTTACTATGGATGACTTCCGGTG
GGCCTTGAGCCAGAGTAACCCATCAGCACTGCGGGAAACCGTGGTAGAGGTGCCACAGGTAACCTGGGAAGACAT
CGGGGGCCTAGAGGATGTCAAACGTGAGCTACAGGAGCTGGTCCAGTATCCTGTGGAGCACCCAGACAAATTCCT
GAAGTTTGGCATGACACCTTCCAAGGGAGTTCTGTTCTATGGACCTCCTGGCTGTGGGAAAACCTTTGTTGGCCAA
AGCCATTGCTAATGAATGCCAGGCCAACTTCATCTCCATCAAGGGTCCTGAGCTGCTCACCATGTGGTTTGGGGA
GTCTGAGGCCAATGTGAGAGAAATCTTTGACAAGGCCCGCCAAGCTGCCCCCTGTGTGCTATTCTTTGATGAGCT
GGATTGATTGCCAAGGCTCGTGGAGGTAACATTGGAGATGGTGGTGGGGCTGCTGACCGAGTCATCAACCAGAT
CCTGACAGAAATGGATGGCATGTCCACAAAAAAATGTGTTTCATCATTGGCGCTACCAACCGGCCTGACATCAT
TGATCCTGCCATCCTCAGACCTGGCCGTCTTGATCAGCTCATCTACATCCCACTTCCTGATGAGAAGTCCCGTGT
TGCCATCCTCAAGGCTAACCTGCGCAAGTCCCCAGTTGCCAAGGATGTGGACTTGAGATTCTGGCTAAAATGAC
TAATGGCTTCTCTGGAGCTGACCTGACAGAGATTTGCCAGCGTGCTTGCAAGCTGGCCATCCGTGAATCCATCGA
GAGTGAGATTAGGCGAGAACGAGAGAGGCAGACAAACCCATCAGCCATGGAGGTAGAAGAGGATGATCCAGTGCC
TGAGATCCGTCGAGATCACTTTGAAGAAGCCATGCGCTTTGCGCGCCGTTCTGTCAAGTGACAATGACATTGCGAA
GTATGAGATGTTTGGCCAGACCCTTCAGCAGAGTCGGGGCTTTGGCAGCTTCAGATTCCCTTCAGGGAACCAGGG
TGGAGCTGGCCCCAGTCAGGGCAGTGGAGGCGGCACAGGTGGCAGTGTATACACAGAAGACAATGATGATGACCT
GTATGGCTAAGTGGTGGTGGCCAGCGTGACGTGAGCTGGCCTGCCTGGACCTTGTTCCCTGGGGGTGGGGGCGCT
TGCCCAGGAGAGGGGACCAGGGGTGCGCCACAGCCTGCTCCATTCTCCAGTCTGAACAGTTTCACTACAGTCTGA
CTCTGGACAGGGGGTTTCTGTTGCAAAAATACAAAACAAAAGCGATAAAATAAAAGCGATTTTTCATTTGGTAGGC
GGAGAGTGAATTACCAACAGGGAATTGGGCCTTGGGCCTATGCCATTTCTGTTGTAGTTTGGGGCAGTGCAGGGG
ACCTGTGTGGGGTGTGAACCAAGGCACTACTGCCACCTGCCACAGTAAAGCATCTGCACTTGACTCAATGCTGCC
CGAGCCCTCCCTTCCCCCTATCCAACCTGGGTAGGTGGGTAGGGGCCACAGTTGCTGGATGTTTATATAGAGAGT
AGGTTGATTTATTTTACATGCTTTTGAGTTAATGTTGGAAGAACTAATCACAAGCAGTTTCTAAACCAAAAAATGA
CATGTTGTAAAAGGACAAATAAACGTTGGGTCAAAATGG

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FIGURE 2674

MASGADSKGDDLSTAILKQKNRPNRLIVDEAINEDNSVVSLSQPKMDELQLFRGDTVLLKGKKRREAVCIVLSDD
TCSDEKIRMNRVVRNNLRVRLGDVISIQPCPDVKYGKRIHVLPIDDTVEGITGNLFEVYLKPYFLEAYRPIRKGD
IFLVRGGMRAVEFKVVETDPSPYCIVAPDTVHCEGEPIKREDEEESLNEVGYYDDIGGCRKQLAQIKEMVELPLR
HPALFKAIGVKPPRGILLYGPPGTGKTLIARAVANETGAFFFLINGPEIMSKLAGESNLKAFEEAEKNAPAI
IFIDELDAIAPKREKTHGEVERRIVSOLLTMDGLKQRAHVIVMAATNRPNSIDPALRRFGRFDREVDIGIPDAT
GRLEILQIHTKNMKLADDVDLEQVANETHGHVGADLAALCSEAALQAIRKKMDLIDLEDETIDAEMNSLAVTMD
DFRWALSQSNPSALRETVVEVPQVTWEDIGGLEDVKRELQELVQYPVEHPDKFLKFGMTPSKGVLFYGPFGCGKT
LLAKAIANECQANFISIKGPELLTMWFGSEANVREIFDKARQAAPCVLFFDELDSIAKARGGNI DGGGAADRV
INQILTEMDGMSTKKNVFIIGATNRPDIIDPAILRPGRLDQLIYIPLPDEKSRVAI LKANLRKSPVAKDVDLEFL
AKMTNGFSGADLTEICQRACKLAIRESIESEIRRERERQTNPSAMEVEEDDPVPEIRRDHFEEAMRFARRSVSDN
DIRKYEMFAQTLQQSRGFGSFRFP SGNQGGAGPSQSGSGGTGGSVYTEDNDDDLYG

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FIGURE 2675

GGCTTCTGGGAGCGACCGCTCCGCTCGTCTCGTTGGTTCCGGAGGTCGCTGCGGCGGTGGGAAATGCTGGCGCGC
GCGGCGCGGGGCACTGGGGCCCTTTTGCTGAGGGGCTCTCTACTGGCTTCTGGCCGCGCTCCGCGCCGCGCCTCC
TCTGGATTGCCCCGAAACACCGTGGTACTGTTTCGTGCCGCAGCAGGAGGCCTGGGTGGTGGAGCGAATGGGCCGA
TTCCACCGGATCCTGGAGCCTGGTTTGAACATCCTCATCCCTGTGTAGACCGGATCCGATATGTGCAGAGTCTC
AAGGAAATTGTCATCAACGTGCCTGAGCAGTCGGCTGTGACTCTCGACAATGTAACCTGCAAATCGATGGAGTC
CTTTACCTGCGCATCATGGACCCTTACAAGGCAAGCTACGGTGTGGAGGACCCTGAGTATGCCGTACCCAGCTA
GCTCAAACAACCATGAGATCAGAGCTCGGCAAACCTCTCTCTGGACAAAGTCTTCCGGGAACGGGAGTCCCTGAAT
GCCAGCATTGTGGATGCCATCAACCAAGCTGCTGACTGCTGGGGTATCCGCTGCCTCCGTTATGAGATCAAGGAT
ATCCATGTGCCACCCCGGGTGAAAGAGTCTATGCAGATGCAGGTGGAGGCAGAGCGGCGGAAACGGGCCACAGTT
CTAGAGTCTGAGGGGACCCGAGAGTCGGCCATCAATGTGGCAGAAGGGAAGAAACAGGCCCAGATCCTGGCCTCC
GAAGCAGAAAAGGCTGAACAGATAAATCAGGCAGCAGGAGAGGCCAGTGCAGTTCTGGCGAAGGCCAAGGCTAAA
GCTGAAGCTATTCTGAATCCTGGCTGCAGCTCTGACACAACATAATGGAGATGCAGCAGCTTCACTGACTGTGGCC
GAGCAGTATGTGAGCGCGTTCTCCAAACTGGCCAAGGACTCCAACACTATCCTACTGCCCTCCAACCTGGCGAT
GTCACCAGCATGGTGGCTCAGGCCATGGGTGTATATGGAGCCCTCACCAAAGCCCCAGTGCCAGGGACTCCAGAC
TCACTCTCCAGTGGGAGCAGCAGAGATGTCCAGGGTACAGATGCAAGTCTTGATGAGGAACCTTGATCGAGTCAAG
ATGAGTTAGTGGAGCTGGGCTTGGCCAGGGAGTCTGGGGACAAGGAAGCAGATTTTCCTGATTCTGGCTCTAGCT
TCCCTGCCAAGATTTTGGTTTTTTATTTTTTTATTTTGAACTTTAGTCGTGTAATAAACTCACCAGTGGCAAACCTG
AAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2676

MLARAARGTGALLLRGSLASGRAPRRASSGLPRNTVVLFPQQEAWVVERMGRFHRILEPGLNILIPVLDRIY
VQSLKEIVINVPEQSAVTLDNVTLQIDGVLYLRIMDPYKASYGVEDPEYAVTQLAQTTRSELGKLSLDKVFRE
ESLNASIVDAINQAADCWGIRCLRYEIKDIHVPPRVKESMQMQVEAERRKRATVLESEGTRESAINVAEGKKQA
ILASEAEKAEQINQAAGEASAVLAKAKAKAEAIRILAAALTQHNGDAAASLTVAEQYVSAFSKLAKDSNTILLPS
NPGDVTSMVAQAMGVYGALTKAPVPGTPDSLSSGSSRDVQGTASLDEELDRVKMS

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FIGURE 2677

GGGCGGCCGGCCAATGCCGGACCGCTTCGGCACCGCCCGCCCGATCCCTCCACCCGTGGGCGGGCAATGGCGGGC
GCAGTTTCGCTCTTGGGTGTGGTGGGGCTGCTGCTTGTGTCTGCGCTGTCCGGGGTCCTAGGAGACCGCGCCAAT
CCCGACCTCCGGGCACACCCAGGGAACGCAGCCCACCCGGCTCTGGAGCCACGGAACCCGGCGGGCGACACCG
CTCAAGGATCAACGCGAGCGGACCCGGGCGGGTCTGCTGCCTCTGGGGCGCTGTACACCGCGGGCGTCTCGGGCT
TTTGTGCTGTACAAGTGTTCAGGGGAAAGATGAACTGCGTTCTCCACGAGGAGGCAAGCAAGCAGCAGCCA
CTGCAGTCAGGTGGGTTTAGCAGAAGTCTGTGCTGGGTCTGGGGGAGTTTAGGGGACAGCAGAAGATACATAACCA
CTTCTGCCCCCTTTTTCCCTTATCCCCAGAGCAACAGCTGGCCAGTTGACACAACAGCTGGCCCAGACAGAGC
AGCACCTGAACAACCTGATGGCCCAGCTGGACCCCTTTTTGAGCGGTGAGGAGAGCAATGATTCTGTGAATTTT
TGGGGAATTTGTGGCAGGAGGGAGGAATGGGGACATAGGTTGGGAGCCACTGAGTGGACATTTCTTCAGTGTGAC
TACTCTGGCTGGAGCCCAGCAGGAGCTTCTGAACATGAAGCTATGGACCATCCACGAGCTGCTGCAAGATAGCAA
GCCGGACAAGGATATGGAGGCTTCAGAACCAGGTGAAGGCTCGGGAGGCGAGTCTGCTGGAGGTGGAGACAAAGT
CTCTGAACTGGAACATTCCTGATCTCTCCCCACACAGAGGCCAGCAGACCTCTTCCTGAGGACTTCTGTTTAAA
GGAGGACGAGGAGGAGATTGGTGACAGTCAGGCCTGGGAGGAGCCCACAACTGGAGCACAGAGACATGGAACCT
AGCTACTTCCTGGGAGGTGGGGCGGGGACTACGGAGAAGGTGCAGCCAGGCTGTGGCAAAGGGCCCCAGTCACAG
CCTTGGCTGGGAAGGAGGGACGACAGCTGAAGGTCGACTAAAACAAAGTCTGTTTTCATG

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FIGURE 2678

MAGAVSLLGVVGLLLVSALSGVLGDRANPDLRAHPGNAAHPGSGATEPRRRPPLKQQRERTRAGSLPLGALYTAA
VAAFVLYKCLQGKDETAVLHEEASKQQPLQSGGFSRSLCWVGGV

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FIGURE 2679

AGTGTGCGATCCCTCAGCCAGGGCATGGAGCTCTCCTGCCCCGGTTTCGCGGTGCCCGGTGCAAGAGCAGCGTGCCC
GCTGGGAGCGGAAAACGCGCCTGCACCGCCCCGGGAGCTGCTAGAGACCGAGCGGCGCTACCAAGAACAGCTGGGGC
TGGTGGCCACGTACTTTTTGGGGATCCTGAAAGCCAAGGGGACCCTGCGACCACCTGAGCGCCAGGCCCTGTTTG
GCTCCTGGGAGCTCATCTACGGCGCCAGCCAGGAGCTGCTTCCCTACCTGGAAGGAGGATGCTGGGGCCAAGGGC
TGGAGGGCTTCTGCCGCCACTTGGAGCTCTATAACCAATTTGCTGCCAACTCAGAGAGGTCCCAGACCACCCTGC
AGGAGCAGCTAAAGAAAAATAAGGTTTCCGGAGGTTTGTACGGCTTCAGGAAGGCCGCCCTGAGTTTGGGGGCC
TTCAGTCCAGGACCTGCTCCCTCTGCCTCTGCAACGGCTCCAGCAGTATGAGAATCTCGTCGTAGCTTTGGCTG
AAAACACAGGTCCCAACAGCCCTGACCATCAACAGCTCACACCTGTCTTCCCTCATGAGAAGCTACTGCTTATG
TCCACAGACCAGGAGGAGCTGTCACGCTGGTACCACAGTCTGACTTGGGCTATCAGCAGCCAGAAAACTAGAGG
AATCTTATAGATTCCAGAACTCAGGATACCTCAGGGATAGGTACAGCCAAGAGTACAAAGGAATCTTCAGTACT
GAACAAAACAGAACCCTTCATGATTTGACAAAGGTCACTTTCTGTTTGCTTGGACCAAGCTACTCCAGATCATCT
GACCAACTCTTAAAAATCACGGCCAGGCACAGTGGCTCATGCCTGTAATCCCAGCACTTTGGGAAGCAGAGGTGG
CAGGATCATTCCAGCCCAGGAGTTCAAGACCAGCCTGGGCAACACAGTGAGTGAGACCCTGTCTCTATTTAAGAA
AAAATAATTAAGAAATTTTATTAAGAAAGAAATCAGGAAACCAAGTCCAACCCAACTAAACCTCAAATGAACC
AGCCCCTAACACAGATGAGGGGATTTGGGACTGATAAGCTCTGTGCTGTGTCCATGGCCCCGTCAATTTATCAAGGC
TGCAGCTTTGTAAATGTGGCTATTTTTATGTTGTGTATAGTTTCTATCATTTATTTTCCACTGGATTTGAGTAA
AGTTTTTTTTCTTTTTTTTGGGAAAGACCCTTCTGTCTCAGTTTGTCTATGAGAAAAGGGATTTTTGGGCCCTGA
ACGCGGGCATGCTGGTGGCCTCAGGAATACGAGGAAAAGAGCTGGAGCTCCCTCTATCTTCTCTGCTGTCACT
GGAAGGCAGCCTCTTTTTGTCTAATAAGGACAGCTCTCAAGAAGGCCAGTTGTCTTAGGCACCTAGTATGG
GTGTGTACAACCAACTAGGATCGAAAAACACACAGGAGCACTCCATCATGAAAACAGACTTTGTTTTAGTCGAC
CTTCAGCTGTGCTCCCTCCTTCCCAGCCAAGGCTGTGACTGGGGCCCTTTGCCACAGCCTGGCTGCACCTTCTCC
GTAGTCCCCGCCCCACCTCCCAGGAAGTAGCTAGGTCCATGTCTCTGTGCTCCAGTTTGTGGGCTCCTCCCAGG
CCTGACTGTACCAATCTCCTCCTCGTCTCCTTTAAACAGAAGTCCCTCAGGAAGAGGTCTGCTGGCCTCTGTGT
GGGGAGAGATCAGGAATGTTCCAGTTTCAGAGACTTTGTCTCCACCTCCAGCAGACTCGCCTCCCGAGCCTTCAC
CTGTTTCTGAAGCCTCCATATCCTTGTCCGGCTTGCTATCTTGACAGCAGCTCGTGGATGGTCCATAGCTTCATGT
TCAGAAGCTCCTGCTGGGCTCCAGCCAGAGTAGTCACACTGAAGAAATGTCCACTCAGTGGCTCCCAACCTATGT
CCCCATTCTCCTCCTGCCACAAATTCCTCCAAAAATTCACAGAATCATTGCTCTCCTCACCGCTCAAAAAGGGG
GTCCAGCTGGGCCATCAGGTTGTTTCCAGGTGCTGCTGTCTGCTGGGCCAGCTGTTGTGTCAACTGGGCCAGCTGTTG
CTCTGGGGATAAGGGAAAAAGGGGGCAGAAGTGGTTATGTATCTTCTGCTGTCCCCTAAACTCCCCGACCCAG
CACAGACTTCTGCTAAACCCACCTGACTGCAGTGGCTGCTGCTTGCTTGCTTGCCTCCTCGTGGAGAACCGCAGTTTCA
TCTTTCCCTGTTGTGGAAGAAGGAAAGGGCAGTACTGAAGCAACAAGGTTCTGCTCCATCACCTCAGTCTCCAG
AGCCAGCCAAGAGAGAGTGCAATTTGAGATGGAGACAGTGATTGGGTTTTTACCTCAGAGAATCACAATCCTAGT
CTATCTAGCTCCTCACCCAGCATATGAAGCGACGTCTATGTCCCACACATGGTCAGTTTGTGAAACACCTCCA
GGAATGAGCAACTCCCTCCGGTTTGAAAAAGCTCTGGTGGCTGAGTGTGTGGCTCACACCTGTAATCCCAGCA
CTTCGGGAAGCCAAGGGCCTCCTCCCAAGGAGAACATGAGACCACTTCATATCTGGAATCTAGAAACACTGGCT
GCAGCAATCAACCTCCTGTGCCAAGGCTGGCCCCACTCTTGTAGCATGGACACTGCTAGCTGGGTTCAAATCCCA
GCTCCAGCAGTTGCCAGCGCTGGGTGACCTCGAGCAAGTGACTACTCCTCACTGGATTGTAGGAGAACTAAATGT
GATAGTCATTATTTACAGTTTACCACACGCTCTTACATCCGTTACCTCCCTGGATCCTCAAAATAACCTCATAA
TATTGGAAGGCC

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FIGURE 2680

TGCTGCTCTCCTCCCGCTCCGTCCTCCTCGCCTGCCACCGGTGCACCCAGTCCGCTCACCCAGCCCAGTCCGTCC
GGTCCTCACC GCCTGCCGGCCGGCCCCACCCCCACCGCAGGCCATGACGCCATCAAGAAGAAGATGCAGATGCT
GAAGCTGGACAAGGAGAACGCCATCGACCGCGCCGAGCAGGCCGAAGCCGACAAGAAGCAAGCTGAGGACCGCTG
CAAGCAGCTGGAGGAGGAGCAGCAGGCCCTCCAGAAGAAGCTGAAGGGGACAGAGGATGAGGTGGAAAAGTATTC
TGAATCCGTGAAGGAGGCCCAGGAGAACTGGAGCAGGCCGAGAAGAAGGCCACTGATGCTGAGGCAGATGTGGC
CTCCCTGAACCGCCGCATTGAGCTGGTTGAGGAGGAGCTGGACCGGGCCCAGGAGCGCCTGGCTACAGCCCTGCA
GAAGCTGGAGGAGGCCGAGAAGGCGGCTGATGAGAGCGAGAGAGGAATGAAGGTCATCGAAAACCGGGCCATGAA
GGATGAGGAGAAGATGGAAGTGCAGGAGATGCAGCTGAAGGAGGCCAAGCACATCGCTGAGGATTGAGACCGCAA
ATATGAAGAGGTGGCCAGGAAGCTGGTGATCCTGGAAGGAGAGCTGGAGCGCTCGGAGGAGAGGGCTGAGGTGGC
CGAGAGCCGAGCCAGACAGCTGGAGGAGGAACCTCGAACCATGGACCAGGCCCTCAAGTCCCTGATGGCCTCAGA
GGAGGAGTATTCACCAAAGAAGATAAATATGAAGAGGAGATCAAAGTGTGGAGGAGAAGCTGAAGGAGGCTGA
GACCCGAGCAGAGTTTGCCGAGAGGTCTGTGGCAAAGTTGGAGAAAACCATCGATGACCTAGAAGAGACCTTGCC
CAGTGCCAAGGAGGAGAACGTCGAGATTACCAGACCTTGGACCAGACCCTGCTGGAAGTCAACAACCTGTGAGG
GCCAGCCCCACCCCCAGCCAGGCTATGGTTGCCACCCCAACCCAATAAACTGATGTTACTAGCCTCTC

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FIGURE 2681

MDAIKKKMQMLKLDKENAIDRAEQAEADKKQAEDRCKQLEEEQALQKKLKGTEDEVEKYSESVKEAQEKLEQAE
KKATDAEADVASLNRRIQLVEEELDRAQERLATALQKLEEAKEKADESERGMKVIENTRAMKDEEKMELQEMQLKE
AKHIAEDSDRKYEEVARKLVILEGELERSEERA EVAESRARQLEELRTMDQALKSLMASEEEYSTKEDKYEEEI
KLLEEKLKEAETRAEFAERSVAKLEKTIDDL EETLASAKEENVEIHQTL DQTLLELNNL

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FIGURE 2682A

CCCAGAAAGCGGCGGGGCGGGCGGGCGGGCGGGCGGCAGAGCCAGGCAGCGCAGGTATAGCCAGGCTGGAGA
AAAGAAGCTGCCACCAATGGTTCACATTTCACTGAAGATCAGCATTGGGAATGTGGTGAAGACGATGCAGTTTGAG
CCGTCTACCATGGTGTACGACGCTGCCGCATCATTCGTGAGCGGATCCCAGAGGCCCGAGCTGGTCTCTCCAGC
GACTTTGGGCTCTTTCTGTGATGATGACCCCAAAAAGGTATATGGCTGGAGGCTGGGAAAGCTTTGGACTAC
TACATGCTCCGAAATGGGGACACTATGGAGTACAGGAAGAAACAGAGACCCCTGAAGATCCGTATGCTGGATGGA
ACTGTGAAGACGATCATGGTGGATGACTCTAAGACTGTCACTGACATGCTCATGACCATCTGTGCCCGCATTGGC
ATCACCAATCATGATGAATATTTCATTGGTTCGAGAGCTGATGGAAGAGAAAAAGGAGGAAATAACAGGGACCTTA
AGAAAGGACAAGACATTGCTGCGAGATGAAAAGAAGATGGAGAAACTAAAGCAGAAATTGCACACAGATGATGAG
TTGAACTGGCTGGACCATGGTCGGACACTGAGGGAGCAGGGTGTAGAGGAGCACGAGACGCTGCTGCTGCGGAGG
AAGTTCCTTTTACTCAGACCAGAATGTGGATTCCCGGGACCCTGTACAGCTGAACCTCCTGTATGTGCAGGCACGA
GATGACATCCTGAATGGCTCCACCCCTGTCTCCTTTGACAAGGCCCTGTGAGTTTGTGGCTTCCAATGCCAGATC
CAGTTTGGGCCCCACAATGAGCAGAAGCACAAGGCTGGCTTCCTTGACCTGAAGGACTTCCTGCCCAAGGAGTAT
GTGAAGCAGAAGGGAGAGCGTAAGATCTTCCAGGCACACAAGAATTGTGGGCAGATGAGTGAGATTGAGGCCAAG
GTCCGCTACGTGAAGCTAGCCCGTTCTCTCAAGACTTACGGTGTCTCCTTCTCCTGGTGAAGGAAAAATGAAA
GGGAAGAACAAGCTAGTGCCAGGCTTCTGGGCATCACCAGGAGTGTGTGATGCGAGTGGATGAGAAGACCAAG
GAAGTGATCCAGGAGTGAACCTCACCACATCAAACGCTGGGCTGCGTCTCCCAAAAGCTTCACCTTGATTTT
GGAGATTACCAAGATGGCTATTACTCAGTACAGACAATGAAGGGAGCAGATTGCACAGCTCATTGCCGGCTAC
ATCGATATCATCTGAAGAAGAAAAAAGCAAGGATCACTTTGGGCTGGAAGGAGATGAGGAGTCTACTATGCTG
GAGGACTCAGTGTCCCCAAAAAGTCAACAGTCTGTCAGCAGCAATACAACCGGGTGGGGAAAGTGGAGCATGGC
TCTGTGGCCCTGCCTGCCATCATGCGCTCTGGAGCCTCTGGTCTGAGAATTTCCAGGTGGGCAGCATGCCCCCT
GCCAGCAGCAGATTACCAGCGGCCAGATGCACCGAGGACACATGCCTCCTCTGACTTCAGCCCAGCAGGCACTC
ACTGGAACCATTAACCTCCAGCATGCAGGCCGTGCAGGCTGCCAGGCCACCCTGGATGACTTTGACACTCTGCCG
CCTCTTGGCCAGGATGCTGCCTCTAAGGCCTGGCGTAAAAACAAGATGGATGAATCAAAGCATGAGATCCACTCT
CAGGTAGATGCCATCACAGCTGGTACTGCGTCTGTGGTGAACCTGACAGCAGGGGACCCTGCTGAGACAGACTAT
ACCGCAGTGGGCTGTGCAGTCACCACAATCTCCTCCAACCTGACGGAGATGTCCCGTGGGGTGAAGCTGCTGGCT
GCCTTGCTGGAGGACGAAGGCGGCAGTGGTTCGGCCCTGTTGCAGGCAGCAAAGGGCCTTGCGGGAGCAGTGTCA
GAACTGCTGCGCAGTGCCCAACCAGCCAGTGCTGAGCCCCGTCAGAACCTGCTGCAAGCAGCTGGGAACGTGGGC
CAGGCCAGTGGGGAGCTGTTGCAACAAATTGGGGAAAGTGATACTGACCCCCACTTCCAGGATGCGCTAATGCAG
CTCGCCAAAGCTGTGGCAAGTGTGTCAGCTGCCCTGGTCTCAAGGCCAAGAGTGTGGCCAGCGGACAGAGGAC
TCGGGACTTCAGACCCAAGTTATTGCTGCAGCAACACAGTGTGCCCTATCCACTTCCCAACTAGTGGCCTGTACT
AAGGTGGTGGCACCTACAATCAGCTCACCTGTCTGCCAAGAGCAACTGGTGGAGGCTGGACGACTGGTAGCCAAA
GCCGTGGAGGGCTGTGTGTCTGCCTCCAGGCAGCTACAGAGGATGGGCAACTGTTGCGAGGGGTAGGAGCAGCA
GCCACAGCTGTCAACCAGGCCCTAAATGAGCTGCTGCAGCATGTGAAAGCCCATGCCACAGGGGCTGGGCCTGCT
GGCCGTTATGACCAGGCTACTGACACCATCCTAACCGTCACTGAGAACATCTTTAGCTCCATGGGTGATGCTGGG
GAGATGGTGGGACAGGCCCGCATCCTGGCCCAAGCCACATCTGACCTGGTCAATGCCATCAAGGCTGATGCTGAG
GGGGAAGTGATCTGGAGAACTCCCGCAAGCTCTTAAGTGCTGCCAAGATCCTAGCTGATGCCACAGCCAAGATG
GTAGAGGCTGCCAAGGGAGCAGCTGCCCCACCCTGACAGTGAGGAGCAGCAGCAGCGGCTGCGGGAGGCAGCTGAG
GGGCTGCGCATGGCCACCAATGCAGCTGCGCAGAATGCCATCAAGAAAAAGCTGGTGCAGCGCCTGGAGCATGCA
GCCAAGCAGGCTGCAGCCTCAGCCACACAGACCATCGCTGCAGCTCAGCACGCAGCCTCTACCCCCAAAGCCTCT
GCCGGCCCCCAGCCCCCTGCTGGTGCAGAGCTGCAAGGCAGTGGCAGAGCAGATTCCACTGCTGGTGCAGGGCGTC
CGAGGAAGCCAAGCCAGCCTGACAGCCCCAGCGCTCAGCTTGCCCTCATTGCTGCCAGCCAGAGCTTCCTGCAG
CCAGGTGGGAAGATGGTGGCAGCTGCAAAGGCCCTCAGTGCCAACGATTACAGGACCAGGCTTCAGCCATGCAGCTG
AGTCAGTGTGCCAAGAACCTGGGCACCGCGCTGGCTGAACCTCCGGACGGCTGCCCAGAAGGCTCAGGAAGCATGT
GGACCTTTGGAGATGGATTCTGCACTGAGTGTGGTACAGAATCTAGAGAAAGATCTACAGGAAGTGAAGGCAGCA
GCTCGAGATGGCAAGCTTAAACCTTACCTGGGGAGACAATGGAGAAGTGTACCCAGGACCTGGGCAACAGCACC
AAAGCCGTGAGCTCAGCCATCGCCAGCTACTGGGAGAGGTTGCCAGGGCAATGAGAATTATGCAGGTATTGCA
GCTCGGGATGTGGCAGGTGGGCTGCGGTCACTGGCCAGGCCGCTAGGGGAGTCTGCTGCACTGACGTGAGATCCT
GCAGTGCAGGCCATTGTACTTGATACGGCCAGTGATGTGCTGGACAAGGCCAGCAGCCTCATTGAGGAGGCGAAA

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FIGURE 2682B

AAGGCAGCTGGCCATCCAGGGGACCTGAGAGCCAGCAGCGGCTTGCCAGGTGGCTAAAGCAGTGACCCAGGCT
CTGAACCGCTGTGTGCTGCTACCTGGCCAGCGCATGTGGATAATGCCCTGAGGGCAGTTGGAGATGCCAGC
AAGCGACTCCTGAGTGACTCGCTTCCTCCTAGCACTGGGACATTTCAAGAAGCTCAGAGCCGGTTGAATGAAGCT
GCTGCTGGGTGAATCAGGCAGCCACAGAACTGGTGAGGCTCTCGGGGAACCCCTCAGGACCTGGCTCGAGCC
TCAGGCCGATTGGACAGGACTTCAGCACCTTCCTGGAAGCTGGTGTGGAGATGGCAGGCCAGGCTCCGAGCCAG
GAGGACCGAGCCCAAGTTGTGTCCAACCTGAAGGGCATCTCCATGTCTTCAAGCAAACCTTCTTCTGGCTGCCAAG
GCCCTGTCCACGGACCCCTGTGCCCCTAACCTCAAGAGTCAGCTGGCTGCAGCTGCCAGGGCAGTAACCTGACAGC
ATCAATCAGCTCATCACTATGTGCACCCAGCAGGCACCCGGCCAGAAGGAGTGTGATAACGCCCTGCGGGAATTG
GAGACGGTCCGGGAACTCCTGGAGAACCCAGTCCAGCCCATCAATGACATGTCTACTTTGGTTGCCTGGACAGT
GTAATGGAGAACTCAAAGGTGCTGGGCGAGGCCATGACTGGCATCTCCCAAATGCCAAGAACGGAAACCTGCCA
GAGTTTGGAGATGCCATTCCACAGCCTCAAAGGCATTTGTGGCTTACCGAGGCAGCTGCACAGGCTGCATAT
CTGGTTGGTGTCTCTGACCCCAATAGCCAAGCTGGACAGCAAGGGCTAGTGGAGCCACACAGTTTGGCCGTGCA
AACCAGGCAATTGAGATGGCTGCCAGAGTTTGGGAGAGCTGGCTGTACCCAGGCCAGGCTGCTCTCTGCAGCC
ACCATTGTGGCTAAACACACCTCTGCACTGTGTAACAGCTGTGCGCTGGCTTCTGCCCCGTACCAACCAATCCTACT
GCCAAGCGCCAGTTTGTACAGTCAGCCAAGGAGGTGGCCAACAGCACAGCTAATCTTGTCAAGACCATCAAGGCG
CTAGATGGGGCCTTACAGAGGAGAACCGTGCCAGTGCCGAGCAGCAACAGCCCCCTCTGCTGGAGGCTGTGGAC
AATCTGAGTGCCTTTGCGTCCAACCTGAGTTCTCCAGCATTCCTGCCAGATCAGCCCTGAGGGTTCGGGCTGCC
ATGGAGCCCATTGTGATCTCTGCCAAGACAATGTTAGAGAGTGCCGGGGGACTCATCCAGACAGCCGGGCCCTC
GCAGTCAATCCCCGGGACCCCCGAGCTGGTTCGGTGTGGCCGGCCACTCCCCGTACTGTCTCAGACTCCATCAAG
AAGCTAATTACAAGCATGAGGGACAAGGCTCCAGGGCAGCTGGAGTGTGAAACGGCCATTGCAGCTCTGAACAGT
TGTCTACGGGACCTAGACCAGGCTTCCCTCGCTGCAGTCAGCCAGCAGCTTGCTCCCCGTGAGGGAATCTCTCAA
GAGGCCTTGACACTCAGATGCTCACTGCAGTCCAAGAGATCTCCCATCTCATTGAGCCGCTGGCCAATGCTGCC
CGGGCTGAAGCCTCCAGCTGGGACACAAGGTGTCCAGATGGCGCAGTACTTTGAGCCGCTCACCCCTGGCTGCA
GTGGGTGCTGCCTCCAAGACCCCTGAGCCACCCGAGCAGATGGCACTCCTGGACCAGACTAAACATTGGCAGAG
TCTGCCCTGCAGTTGCTATACACTGCCAAGGAGGCTGGTGGTAACCCAAAGCAAGCAGCTCACACCCAGGAAGCC
CTGGAGGAGGCTGTGAGATGATGACCGAGGCCGTAGAGGACCTGACAACAACCCCAACGAGGCAGCCAGTGCT
GCTGGGGTTCGTGGGTGGCATGGTGGACTCCATACCCAGGCCATCAACCAGCTAGATGAAGGACCAATGGGTGAA
CCAGAAGGTTTCCTTCGTGGATTACCAAACAATATGGTGCAGGACAGCCAAGGCCATTGCAGTGACCGTTGAGGAG
ATGGTTACCAAGTCAAACACAGCCAGAGGAGCTGGGCCCTCTTGCTAACAGCTGACCACTGACTATGGCCGT
CTGGCCTCGGAGGCCAAGCCTGCAGCGGTGGCTGCTGAAATGAAGAGATAGGTTCCCATATCAAACACCGGGTA
CAGGAGCTGGGCCATGGCTGTGCCGCTCTGGTCACCAAGGCAGGCGCCCTGCAGTGCAGCCCCAGTGATGCCATC
ACCAAGAAGGAGCTCATAGAGTGTGCCCCGAGAGTCTCTGAGAAGGTCTCCACGTCTGGCTGCGCTCCAGGCT
GGGAATCGTGGCAACCAGGCTGCATCACAGCAGCCAGCGCTGTGTCTGGTATCATTGCTGACCTCGACACCACC
ATCATGTTGCCACTGCTGGCACGCTCAATCGTGAGGGTACTGAACTTTCGCTGACCACCGGGAGGGCATCCTG
AAGACTGCGAAGGTGCTGGTGGAGGACACCAAGGTCTGGTGCAAAACGCAGCTGGGAGCCAGGAGAAGTTGGCG
CAGGCTGCCAGTCTCCGTGGCGACCATCACCCGCCTCGCTGATGTGGTCAAGCTGGGTGCAGCCAGCCTGGGA
GCTGAGGACCCTGAGACCCAGGTGGTACTAATCAACGCAGTGAAAGATGTAGCCAAAGCCCTGGGAGACCTCATC
AGTGCAACGAAGGCTGCAGCTGGCAAAGTTGGAGATGACCCTGCTGTGTGGCAGCTAAAGAACTCTGCCAAGGTG
ATGGTGACCAATGTGACATCATTGCTTAAGACAGTAAAGCCGTGGAAGATGAGGCCACCAAGGCACCTCGGGCC
CTGGAGGCAACCACAGAACACATACGGCAGGAGCTGGCGGTTTTCTGTTCCCCAGAGCCACCTGCCAAGACCTCT
ACCCAGAAAGACTTCATCCGAATGACCAAGGGTATCACCATTGGCAACCGCCAAGGCCGTTGCTGCTGGCAATTCC
TGTCGCCAGGAAGATGTCATTGCCACAGCCAATCTGAGCCGCCGTGCTATTGCAGATATGCTTCGGGCTTGAAG
GAAGCAGCTTACCACCCAGAAGTGGCCCTGATGTGCGGCTTCAGCCCTGCACTATGGCCGGGAGTGTGCCAAT
GGCTACCTGGAAGTGTGACCATGTACTGCTGACCCTGCAGAAGCCAAGCCAGAACTGAAGCAGCAGTTGACA
GGACATTCAAAGCGTGTGGCTGGTTCCGTCACTGAGCTCATCCAGGCTGCTGAAGCCATGAAGGGAACAGAAATGG
GTAGACCCAGAGGACCCACAGTCATTGCTGAGAATGAGCTCCTGGGAGCTGCAGCCGCCATTGAGGCTGCAGCC
AAAAAGCTAGAGCAGCTGAAGCCCCGGGCCAAACCCAAGGAGGCAGATGAGTCCTTGAACCTTGGAGGAGCAGATA
CTAGAAGCTGCCAAGTCCATTGCAGCAGCCACCAAGTGCAGTGGTAAAGGCTGCGTCCGCTGCCAGAGAGAATA

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FIGURE 2682C

GTGGCCCAAGGGAAGGTGGGTGCCATTCCAGCCAATGCACTGGACGATGGGCAGTGGTCCCAGGGCCTCATTCT
GCTGCCCCGATGGTGGCTGCGGCCACCAACAATCTGTGTGAGGCAGCCAATGCAGCTGTACAAGGCCATGCCAGC
CAGGAGAAGCTCATCTCATCAGCCAAGCAGGTAGCTGCCTCCACAGCCCAGCTCCTTGTGGCCTGCAAGGTCAAG
GCTGACCAGGACTCGGAGGCAATGAAACGACTTCAGGCTGCTGGCAACGCAGTGAAGCGAGCCTCAGATAATCTG
GTGAAAGCAGCACAGAAGGCTGCAGCCTTTGAAGAGCAGGAGAATGAGACAGTGGTGGTGAAAGAGAAGATGGTT
GGCGGCATTGCCCAGATCATCGCAGCACAGGAAGAAATGCTTCGGAAGGAACGAGAGCTGGAAGAGGCGCGGAAG
AAACTGGCCCAGATCCGGCAGCAGCAGTACAAGTTTCTGCCTTCAGAGCTTCGAGATGAGCACTAAAGAAGCCTC
TTCTATTTAATGCAGACCCGGCCCAGAGACTGTGCGTGCCACTACCAAAGCCTTCTGGGCTGTCGGGGCCCAACC
TGCCCAACCCCAGCACTCCCCAAAGTGCTGCCAAACCCAGGGCCTGGCCCCGCCAGTCCCGCAGTACATCCC
CTGTCCCCTCCCCAACCCCAAGTGCTTCATGCCCTAGGGCCCCCAAGTGCTGCCCTCCCCAGAGTATTAAC
GCTCCAAGAGTATTATTAACGCTGCTGTACCTCGATCTGAATCTGCCGGGGCCCCAGCCCACTCCACCCTGCCAG
CAGCTTCAGCCAGTCCCCACAGCCTCATCAGCTCTCTTCACCGTTTTTTTGATACTATCTTCCCCACCCCCAGC
TACCCATAGGGGCTGCAGAGTTATAAGCCCCAACAGGTCATGCTCCAATAAAAAATGATTCTACCTACAAAAAAA
AAAAAAAAAAAA

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FIGURE 2683

MVALSLKISIGNVVKTMQFEPSTMVYDACRIIRERIPEAPAGPPSDFGLFLSDDDPKKGIWLEAGKALDYMLRN
GDTMEYRKKQRPLKIRMLDGTVKTIMVDDSKTVDMLMTICARIGITNHDEYSLVRELMEEEKKEEITGTLRKDKT
LLRDEKKMEKLKQKLHTDDELNWLHDGRTLREQGVVEEHETLLLRKFFYSQNVDSRDPVQLNLLYVQARDDILN
GSHPVSFDKACEFAGFQCQIQFGPHNEQKHKAGFLDLKDFLPKEYVKQKGERKIFQAHKNCGQMSEIEAKVRYVK
LARSCLKTYGVSFLLVKEKMGKNKLVPRLLGITKECVMRVDEKTKEVIQEWNLNLIKRWAAAPSKSFTLDFGDYQD
GYYSVQTTEGEQIAQLIAGYIDIILKKKSKDHFGLGDEESTMLEDSVSPKKSTVLQQQYNRVGKVEHGSVALP
AIMRSGASGPENFQVGSMPPAQQQITSGQMRGHMPLTSAQQALTGTINSSMQAVQAAQATLDDFDLPLPLGQD
AASKAWRKKNKMDSEKHEIHSQVDAITAGTASVVNLTAGDPAETDYTAVGCAVTTISSNLTEMSRGVKLLAALLED
EGGSGRPLLQAAKGLAGAVSELLRSAQPASAEPRQNLQAAAGNVGQASGELLQQIGESDTPHFDALMQLAKAV
ASAAAALVLKAKSVAQRTEDSGLQTQVIAAATQCALSTSQLVACTKVVAPTISSPVCQEQLVEAGRLVAKAVEGC
VSASQAATEDGQLLRGVGAAATAVTQALNELLQHVKAHATGAGPAGRYDQATDITLTVTENIFFSSMGDAGEMVGQ
ARILAQATSDLVNAIKADAEGESDLENSRKLSSAAKILADATAKMVEAAKGAAAHDPDSEEQQRLREAAEGLRMA
TNAQAQNAIKKKLVQRLEHAAKQAAASATQTIAAAQHAASPKASAGPQPLLVSCKAVAEQIPLLVSQVGRGSQA
QPDSPSAQLALIAASQSFLQPGGKMVAAKASVPTIQDQASAMQLSQCAKNLGTALAEALRTAAQKAQEACGPLEM
DSALSVMQNLKDLQEVKAAARDGKLKPLPGETMEKCTQDLGNSTKAVSSAIAQLLGEVAQGNENYAGIAARDVA
GGLRSLAQAAARGVAALTSDDPAVQAIVLDTASDVLKASSLIEEAKKAAGHPGDPESQQRQAQVAKAVTQALNRCV
SCLPGQRDVDNALRAVGDAKRLSDSLPPSTGTQEAQSRLEAAAGLNQAATELVQASRGTFQDLARASGRFG
QDFSTFLEAGVEMAGQAPSQEDRAQVVSNLKGISMSSSKLLAAKALSTDPAAPNLKSQLAAAAAVTDSINQLI
TMCTQQAPGQKECDNALRELETVRELLENPVQPINDMSYFGCLDSVMENSKVLGEAMTGISQNAKNGNLPEFGDA
ISTASKALCGFTEAAAQAAYLGVSDPNSQAGQQGLVEPTQFARANQAIQMACQSLGEPGCTQAQVLSAATIVAK
HTSALCNSCRLASARTTNPTAKRQFVQSAKEVANSTANLVKTIKALDGAFTENRAQCRAATAPILLEAVDNLISAF
ASNPEFSSIPAQISPEGRAAMEPIVISAKTMLSEAGGLIQTARALAVNPRDPPSWSVLGHRSRTVSDSIKKLITS
MRDKAPGQLECEATAIAALNSCLRDLDQASLAAVSQQLAPREGISQEAALHTQMLTAVQEISSLIEPLANAARAEAS
QLGHKVSQMAQYFEPLTLAAVGAASKTLSHPQQMALLDQTKTLAESALQLLYTAKEAGGNPKQAAHTQEALEEAV
QMMTEAVEDLTITLNEAASAAGVVGMVDSITQAINQLDEGPMGEPEGSFVDYQTTMVRTAKAIAVTVQEMVTKS
NTSPEELGPLANQLTSDYGRASEAKPAAVAAENEEIGSHIKHRVQELGHGCAALVTKAGALQCSPSDAYTKKEL
IECARRVSEKVS HVLAALQAGNRGTQACITAASAVSGIADLDTTIMFATAGTLNREGTETFADHREGILKTAKV
LVEDTKVLVQNAAGSQEKLAQAAQSSVATITRLADVVKLGAASLGAEDPETQVVLINAVKDVAKALGDLISATKA
AAGKVGDDPAVWQLKNSAKVMVTNVTSLKTKVKAVEDEATKGTRALEATTEHIRQELAVFCSPPEPAKTSTPEDF
IRMTKGITMATAKAVAAGNSCRQEDVIATANLSRRAIADMLRACKEAAYHPEVAPDVRLRALHYGRECANGYLEL
LDHVLLTLQKPSPELKQQLTGHSKRVSAGVTELIQAAEAMKGTEWVDPEDPTVIAENELLGAAAAIEAAAKKLEQ
LKPRAKPKADESLNFEEQILEAAKSIAAATSALVKAASAAQRELVAQGVGAIPANALDDGQWSQGLISAARMV
AAATNNLCEAANAQVGHASQEKLISSAKQVAASTAQLLVACKVKADQDSEAMKRLQAAGNAVKRASDNLVKAQ
KAAAFEEQENETVVVKEKMGVGGIAQIIAAQEEMLRKERELEEARKKLAQIRQQQYKFLPSELRDEH

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FIGURE 2684

AGACCGGAAAGGGCTCGGGTCATCCCGGCGCCAGGGTCACCTTCCACAGGGCTGGCACCTGGGCGCGGGCGCTG
CCCCGAGCCCGGCCGGGACCTGGCGCCCAATCTGGGGGACCCGGTGCCGTGGCCAGGGGCGGGCCGAGG
TCCCGGGGCGGTGCGCTTGCGGGCCCGTCCCGGGGCGGTGCGCTGGTGGGCTGGCCCCGCGGCTCCTCCCTCTCT
GCGGGCCAGTCGCCCCTTTGGCCGGGCGAGCTAATCGTCGGCTCAATGACGACGAGGCCCCGACCCTTCCCGTCCA
GGACCTACAGAGACAACCGAAGGAGAGCCCCAAGGCGGCTTCTTTGCTGTGCGCGCCCCACTGAAGCAAGAGCTC
CCCGGCTCCACTGAAAACACCAGCTCATTAAAGCTTTCCCCAACGCCCGGCCCTCCGGGACGATACCTAACAACGA
CCGGCGCCCCGATCTGGAATAGGCTGGCGAGATACTTAGTATCCGAGGGCTCGGGACTTGGCGCCATCGAGGTCA
TGGGGACCCAGGATCCAGGGAACATGGGAACCGGCGTCCCAGCCTCGGAGCAGATAAGCTGTGCCAAAGAGGATC
CACAAGTTTATTGCCCTGAAGAGACTGGCGGCACCAAGGATGTGCAGGTTACAGACTGTAAGAGTCCCGAAGACA
GCCGACCCCCAAAAGAGACGGACTGCTGCAATCCGAGGACTCTGGGCAGCTGATGGTTTCTATGAGGGTAAAG
CTATGGGCTACCAGGTGCGCTCCCTTTGGCTGGCGCATCTGTCTGGCTCATGAGTTTACAGAGAAGAGGAAACCTT
TTCAAGCTAACACGTCTCCCTAAGCAACATGATAAAGCATATAGGCATGGGCTTGAGGTACCTGCAGTGGTGGT
ACCGGAAGACCCATGTGGAAAAGAAGACACCTTTTCATCGACATGATCAATTCTGTACCCCTAAGACAGATTTATG
GTTGTCCCTTGGGTGGCATCGGGGGAGGCACTATTACCCGTGGCTGGAGAGGCCAGTTCTGTGCTTGGCAGCTTA
ACCTTGGAAATGTATCAGCACCGGACAGTCATCGCTGACCAAGACAGCAGCCTGCCTGTAGGAGTCTTTGTGTGGG
ATGTGGAAAATGAAGGGGACGAAGCTCTAGATGTGTCCATCATGTTCTCCATGCGGAATGGACTGGGTGGTGGAG
ACGATGCCCCAGGGGTTTGTGGAATGAGCCCTTCTGTCTGGAGCGTAGCGGGGAAACTGTCCGGGGGCTGCTCCT
GCATCATCCAACCCTTCCAAACCCCTACACGATGGCTGTGGCTGCACGAGTCACGGCAGCTACCACGGTAACCCA
CATCACAGCCTTTGACCCTGACAGCACGGGGCAGCAGGTGTGGCAGGATCTACTTCAGGATGGACAGCTGGACTC
TCCCACTGGCCAAAGCACCCCTACGCAGAAAGGAGTAGGCATTGCTGGAGCTGTGTGTGTTTCCAGCAAGTTGCG
ACCTCGAGGGCAGTGCCGCCTGGAGTTTTCACTGGCTTGGGACATGCCCAGGATCATGTTTGGAGCTAAAGGCCA
AGTCCACTACAGGCGGTATACAAGGTTCTTTGGCCAGGATGGAGATGCAGCACCTGCCCTCAGCCACTATGCACT
GTGCCGATACGAGAGTGGGAAGAGAGGATCTCAGCTTGGCAGAGCCCCGGTATTGGATGACAGATCACTGCCTGC
CTGGTACAAATCTGCGCTGTTCAATGAACATATACTTCTTGGCTGATGGAGGCACAGTGTGGCTGGAAAGTTCTTGA
GGACTCCCTACCAGAGGAGCTGGGCAGAAACATGTGTACCTCCGCCCCACCCTACGGGACTACGGTGCATTTGG
CTACCTTGAGGGCCAGGAGTACCGCATGTACAACACATATGATGTCCACTTTTATGCTTCCCTTGGCCCTCATCAT
GCTCTGGCCCAAACCTTGAGCTCAGCCTACAGTATGACATGGCTCTGGCCACTCTCAGGGAGGACCTGACACGGCG
ACGGTACCTGATGAGTGGGGTGTATGGCACCTGTGAAAAGGAGGAACGTCATCCCCCATGATATTGGGGACCCAGA
TGATGAACCATGGCTCCGCGTCAATGCATATTTAATCCATGATACTGCTGATTGGAAGGACCTGAACCTGAAGTT
TGTGCTGCAGGTTTATCGGGACTATTACCTCACGGGTGATCAAAACTTCTTGAAGGACATGTGGCCTGTGTGTCT
AGCTGTGATGGAATCTGAAATGAAGTTTGACAAGGACCATGATGGACTCATTGAAAATGGAGGCTATGCAGACCA
GACCTATGATGGATGGGTGACCACAGGCCCCAGTGCTTACTGTGGAGGGCTGTGGCTGGCAGCTGTGGCTGTGAT
GGTCCAGATGGCTGCTCTGTGTGGGGCACAGGACATCCAGGATAAGTTTTCTTCTATCCTCAGCCGGGGCCAAGA
AGCCTATGAGAGACTGCTGTGGAATGGCCGCTATTACAACATATGACAGCAGCTCTCGGCCCTCAGTCTCGTAGTGT
TATGTCTGACCAGTGTGCTGGACAGTGGTTTCTGAAGGCCTGTGGCCTAGGAGAAGGAGACACTGAGGTGTTTCC
TACCCAACATGTGGTCCGTGCTCTCCAAACTATCTTTGAGCTGAACGTCCAGGCCTTTGCAGGAGGGGCCATGGG
GGCTGTGAATGGGATGCAGCCCCATGGTGTCCCTGATAAATCCAGTGTGCAGTCTGATGAAGTCTGGGTGGGTGT
GGTCTACGGGCTGGCAGCTACCATGATCCAAGAGGGCCTGACTTGGGAGGGCTTCCAGACAGCTGAAGGCTGCTA
CCGTACCGTGTGGGAGCGCCTGGGTCTGGCCTTCCAGACCCAGAGGCATACTGCCAGCAGCGAGTGTTCGCTC
ACTGGCCTACATGCGGCCACTGAGCATATGGGCCATGCAGCTAGCCCTGCAACAGCAGCAGCACAAAAAGGCCTC
CTGGCCAAAAGTCAAACAGGGCACAGGACTAAGGACAGGGCCTATGTTTGGACCAAAGGAAGCCATGGCAAACCT
GAGCCAGAGTGAGCCGTCTGAACTGTGGGAGGGAAGTGCTAACAGCCAGCCTCCAGCCTGGCCTTTCCTCCTT
CCCCTCTGAACCTCCTGCAACCCTGAGCCATCAGGACAATCATACCCCTTCCCTTCTCTCCACCCAATTGTGCCA
GTAAATGGGGTTGAGGGTGACCTAGGCAGCATTAGAATCACTTATTTATTTCTTCTCACCTGTTCCCTGACT
GCGTGAATGTTGAGGGAGGTGAGTTGATTTCCCAGGTACATTGATGGTGTGACAGACACATGGGTACAAATAA
AAGACCCAGAAAGCC

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FIGURE 2685

MAVAARVTAATTVTHTITAFDPDSTGQQVWQDLLQDGLDSTPTQKGVGIAGAVCVSSKLRPRGQCRLEFS
LAWDMPRIMFGAKGQVHYRRYTRFFGQDGDAAALSHYALCRYAEWEERI SAWQSPVLDDRSLPAWYKSALFNEL
YFLADGGTVWLEVLDSLPEELGRNMCHLRPTLRDYGRFGYLEGQEYRMYNTYDVHFIYASFALIMLWPKLELSLQ
YDMALATLREDLTERRYLMSGVMA PVKRRNVIPHDIGDPDDEPWLRVNAYLIHDTADWKDLNLKFVLQVYRDYYL
TGDQNF LKDMWPVCLAVMESEMKFDKDHGGLIENGGYADQTYDGWVTTGPSAYCGGLWLA AVAVMVQMAALCGAQ
DIQDKFSSILSRGQEAYERLLWNGRYNYDSSSRPQSRVMSDQCAGQWFLKACGLGEGDTEVFPTQHVVRLQT
IFELNVQAFAGGAMGAVNGMQPHGVDPKSSVQSDEVWVG VVYGLAATMIQEGLTWEGFQTAEGCYRTVWERLGLA
FQTPEAYCQQRVFRSLAYMRPLSIWAMQLALQQQHHKASWPKVKQGTGLRTGPMFGPKEAMANLSPE

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FIGURE 2686

AAAAAGAAATCAAGAATGCAATTTTATTACAATAGTCACGCCAAAAATACCTAGAAATAAATTTAACTGAGGAT
 GTAAAAGACCTCTACAAGGAGAGTTCAATCGGTAGCGGGAGCGGAGAGCTGACCCAGAGAGCCCTGGGCAGCCC
 CACCTCCGCCGCCGGCCTAGTTACCATCACACCCCGGGAGAAGCCGCAGCTGCCGCAGCCGGCCCCAGTCACCAT
 CACCGCAACTATGAGCAGCGAGGCCGAGACCCAGCAGCCGCCCGCCGCTCCCCACGCCGCCCGCCCTCAGCG
 CCGCCGACACCCACCCAGCACTGCAGGCAGCGGCGCAGGAAGCGGTGGCCCGGGCGGCCCTCACATCGGCGGCGC
 CTGCCGGCGGGGACAAGAAGGTCATCGCAACGAAGGTTTGGGAACAGTAAAATGGTTCAGTGTAAGGAACGGAT
 ATGGTTTCATCAACAGGAATGACACCAAGGAAGATGTATTTGTACACCAGACTGCCAGAAAGAAGAATAACCCCA
 GGAAGTACCTTCGCAGTGTAGGAGATGGAGAGACTGTGGAGTTTGATGTTGTTGAAGGAGAAAAGGGTGCGGAGG
 CAGCAAATGTTACAGGGCCTGGTGGTGTTCAGTTCAAGGCAGTACATATGCAGCAGACCGTAACCATTATAGAC
 GCTATCCACGTCGTAGGGTCTCCACGCAATTACCAGCAAAATTACCAGAATAGTGAGAGTGGGGAAAAGAACGA
 GGGATCGGAGAGTGCTCCCGCAGGCCAAGCCCAACAACGCCGGCCCTACCGCAGGCGAAGGTTCCACCTTACTA
 CATGCGGAGACCCTATGGGCGTCGACCACAGTATTCCAACCTCCTGTGCAGGGTGAAGTGATGGAGGGTGCTGA
 CAACCAGGGTGCGAGGAGAACAAGGTAGACCAGTGAGGCAGAAATACGTATCGGGGATATAGACCACGATTCCGCAG
 GGGCCCTCCACGCCAAAGACAGCCTAGAGAGGACGGCAATGATGAAGATAAAGAAAATCAAGGAGATGAGACCCA
 AGGTCAGCAGCCACCTCAACGTCGGTACCGCCGCAACTTCAATTGCCGACGCAGACACCCAGAAAACCTTAAACC
 ACAAGATGGCAAAGAGACAAAAGCAGCCGATCCACCAGCTGAGAATTCGTCCACTCCTGAGGCTGAGCGGGGCAG
 GACTGAGTAAATGCCAGCTTACCATCTCTACCATCATCCGTTTTAGTCATCCAACAGGAAGAAATATGAAATTCC
 AGCTATAAGAAATGAACAAAAGATTGGAGCTGAAGACCTTAAGTGCTTGCTTTTGCCCGTTGACCAGATAAATA
 GAACATATCTGCATTATCTATGCAGCATGGGATTTTTATTATTTTTACCTAAAGACGTCCTTTTTGGTAATAACA
 AACGTGTTTTTTAAAAAAGCCTGGTTTTTTTCAATACGCCTTTAAAGG

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FIGURE 2687

MRRPYGRRPQYSNPPVQGEVMEGADNQGAGEQGRPVQRNTYRGYRPRFRRGPPRQRQPREDEGNDKEDKENQGD
ETQ
GQQPPQRRYRRNFCRRRHPENPKPQDGKETKAADPPAENSSTPEAERGRTE

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FIGURE 2688

GAAGAATAACCCCAGGAAGTACCTTCGCAGTATTCCAACCCCTCCTGTGCAGGGTGAAGTGATGGAGGGTGCTGAC
AACCAGGGTGCAGGAGAACAAGGTAGACCAGTGAGGCAGAATACGTATCGGGGATATAGACCACGATTCCGCAGG
GGCCCTCCACGCCAAAGACAGCCTAGAGAGGACGGCAATGATGAAGATAAAGAAAATCAAGGAGATGAGACCCAA
GGTCAGCAGCCACCTCAACGTCGGTACCGCCGCAACTTCAATTGCCGACGCAGACACCCAGAAAACCTAAACCA
CAAGATGGCAAAGAGACAAAAGCAGCCGATCCACCAGCTGAGAATTCGTCCACTCCTGAGGCTGAGCGGGGCAGG
ACTGAGTAAATGCCAGCTTACCATCTCTACCATCATCCGGTTTAGTCATCCAACAGGAAGAAATATGAAATTCCA
GCTATAAGAAATGAACAATAGAACTATCTGCATTATCTATGCAGCATGGGATTTTATTATTTTACCTAAAGAC
GTCTCTTTTTTGTAATAACAAACGTGTTTTTT

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FIGURE 2689

AGCGGTGGCTGCCGGGCGTGGTGTGCGGTGGGTGCGTTGGTTTTTGTCTCACCGTTGGTGTCCGTGCCGTTTCAGTT
GCCCCGCCATGGCTGAGCTGGATCCGTTTCGGCGCCCCCTGCCGGCGCCCCCTGGCGGTCCC GCGCTGGGGAACGGAGT
GGCCGGCGCCGGCGAAGAAGACCCGGCTGCGGCCCTTCTTGGCGCAGCAAGAGAGCGAGATTGCGGGCATCGAGAA
CGACGAGGCCCTTCGCCATCCTGGACGGCGGGCGCCCCGGGGCCCCAGCCGCACGGCGAGCCGCCGGGGGGTCCGGA
TGCTGTTGATGGAGTAATGAATGGTGAATACTACCAGGAAAGTAATGGTCCAACAGACAGTTATGCAGCTATTTT
ACAAGTGGATCGATTGCAGTCAGAGCCTGAAAGTATCCGTAAATGGAGAGAAGAACAAATGGAACGCTTGGAAGC
CCTTGATGCCAATTCTCGGAAGCAAGAAGCAGAGTGGAAAGAAAAGGCAATAAAGGAGCTAGAAGAATGGTATGC
AAGACAGGACGAGCAGCTACAGAAAACAAAAGCAACAACAGGGGCAGCAGAAGAAGCCTTTGTAAATGACATTGA
CGAGTCGTCCCCAGGCACTGAGTGGGAACGGGTGGCCCGGCTGTGTGACTTTAACCCCAAGTCTAGCAAGCAGGC
CAAAGATGTCTCCCGCATGCGCTCAGTCCTCATCTCCCTCAAGCAGGCCCCGCTGGTGCACTGAAGAGCCACCCT
GTGGAACACTACATCTGCAATATCTTAATCCTACTCAGTGAAGCTCTTCACAGTCATTGGATTAAATTATGTTGA
GTTCTTTTGGACCAAACCTTTTTGTCTTTAGAGTTGTTTCATTGTTTGTGATTGCATGTTTCCTTCCTTCAACTGT
GTTCTCCCTGGCATTTCAGAGAGGAGGGAGAGGAGGAAGAGGAAGGGGAGGGAAGCTTCCCAAGAGTAGCCTCAAC
CTGTGCTTCTGTGCATTATTCTGAGAATAAATTTCTGTTTCAAACGTGT

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FIGURE 2690

MAELDPFGAPAGAPGGPALGNGVAGAGEEDPAAAFQAQQESEIAGIENDEAFAILDGGAPGPHGEPPGGPDV
DGVMNGEYYQESNGPTDSYAAISQVDRLQSEPESEIRKWREEQMERLEALDANSRKQEAWEKKAIKELEEWYARQ
DEQLQKTKANNRAAEEAFVNDIDESSPGTEWERVERLCDFNPKSSKQAKDVSRMRSVLISLKQAPLVH

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FIGURE 2691

GCCACCGCTGTGGTGTCTGGTGGGTCGGTTGGTTTTTGTCTCACCGTTGGTGTCCGTGCCGTTTCAGTTGCCCGCCA
TGGCTGAGCTGGATCCGTTTCGGCGCCCCCTGCCGGCGCCCCCTGGCGGTCCCGCGCTGGGGAACGGAGTGCCCGGCG
CCGGCGAAGAAGACCCGGCTGCGGCCTTCTTGGCGCAGCAAGAGAGCGAGATTGCGGGCATCGAGAACGACGAGG
CCTTCGCCATCCTGGACGGCGGGCGCCCCGGGCCCCAGCCGCACGGCGAGCCGCCGGGGGGTCCGGATGCTGTTG
ATGGAGTAATGAATGGTGAATACTACCAGGAAAGTAATGGTCCAACAGACAGTTATGCAGCTATTTACAAGTGG
ATCGATTGCAGTCAGAGCCTGAAAGTATCCGTAAATGGAGAGAAGAACAATGGAACGCTTGGAAGCCCTTGATG
CCAATTCTCGGAAGCAAGAAGCAGAGTGGAAAGAAAAGGCAATAAAGGAGCTAGAAGAATGGTATGCAAGACAGG
ACGAGCAGCTACAGAAAACAAAAGCAAACAACAGGGTGGCAGATGAAGCTTCTACAAACAACCCTTCGCTGACG
TGATTGGTTATGTCACAAACATAAACCATCCTTGCTACAGCCTAGAACAGGCAGCAGAAGAAGCCCTTGTAATG
ACATTGACGAGTCGTCCCCAGGCACTGAGTGGGAACGGGTGGCCCGGCTGTGTGACTTTAACCCCAAGTCTAGCA
AGCAGGCCAAAGATGTCTCCCGCATGCGCTCAGTCCTCATCTCCCTCAAGCAGGCCCCGCTGGTGCACTGAAGAG
CCACCCTGTGGAAACACTACATCTGCAATATCTTAATCCTACTCAGTGAAGCTCTTCACAGTCATTGGATTAAAT
ATGTTGAGTTCTTTTGGACCAAACCTTTTTGTCTTTAGAGTTGTTTATTGTTTGTGATGTCATGTTTCCTTCCTT
CAACTGTGTTCTCCCTGGCATTACAGAGAGGAGGGAGAGGAGGAAGAGGAAGGGGAGGGAAGCTTCCCAAGAGTAG
CCTCAACCTGTGCTTCTGTGCATTATTCTGAGAATAAATTTCTGTTTCAAACGT

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FIGURE 2692

MAELDPFGAPAGAPGGPAL'GNGVAGAGEEDPAAAFQAQQESEIAGIENDEAFAILDGGAPGPFHGEPPGGPDAV
DGVMNGEYYQESNGPTDSYAAISQVDRLOSEPESIRKWREEQMERLEALDANSRKQEAWEKKAIKELEEWYARQ
DEQLQKTKANNRVADEAFYKQPFADVIGYVTNINHPCYSLEQAEEAFVNDIDESSPGTEWERVERLCDFNPKSS
KQAKDVSRMRSVLISLKQAPLVH

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FIGURE 2693

GCTTCTGTACTGCCAGGTCCGGGTCGGCGGGCTGCACTGCGGATCAGACCGGTGCGACTCATGAAGGTGTTCTGTCA
CCCGCAGGATAACCCGCCGAGGGTAGGGTCGCGCTCGCCCGGGCGGCAGACTGTGAGGTGGAGCAGTGGGACTCGG
ATGAGCCCCATCCCTGCCAAGGAGCTAGAGCGAGGTGTGGCGGGGGCCCCACGGCCTGCTCTGCCTCCTCTCCGACC
ACGTGGACAAGAGGATCCTGGATGCTGCAGGGGCCAATCTCAAAGTCATCAGCACCATGTCTGTGGGCATCGACC
ACTTGGCTTTGGATGAAATCAAGAAGCGTGGGATCCGAGTTGGCTACACCCCAGATGTCCTGACAGATAACACCG
CCGAACTCGCAGTCTCCCTGCTACTTACCACCTGCCGCCGGTTGCCGGAGGCCATCAGGAAGTGAAGAATGGTG
GCTGGACCTCGTGGGAAGCCCCCTCTGGCTGTGTGGCTATGGACTCACGCAGAGCACTGTCTGGCATCATCGGGCTGG
GGCGCATAGGCCAGGCCATTGCTCGGCGTCTGAAACCATTCCGGTGTCCAGAGATTTCTGTACACAGGGCGCCAGC
CCAGGCCTGAGGAAGCAGCAGAATTCCAGGCAGAGTTTGTGTCTACCCCTGAGCTGGCTGCCCAATCTGATTTC
TCGTCGTGGCCTGCTCCTTAACACCTGCAACCGAGGGACTCTGCAACAAGGACTTCTTCCAGAAGATGAAGGAAA
CAGCTGTGTTTCATCAACATCAGCAGGGGCGACGTCGTAAACCAGGACGACCTGTACCAGGCCTTGGCCAGTGGTA
AGATTGCAGCTGCTGGACTGGATGTGACGAGCCCAGAACCACTGCCTACAAACCACCCCTCTCCTGACCCTGAAGA
ACTGTGTGATTCTGCCCCACATTGGCAGTGCCACCCACAGAACCCGCAACACCATGTCCTTGTGGCAGCTAACA
ACTTGCTGGCTGGCCTGAGAGGGGAGCCGATGCCTAGTGAAGTCAAGCTGTAGCCAAACAGTAGAGATGGAGGGC
CGGGAAGCAAACCGTGCCCTGGTATTGTCAGACACACCCAGGCTTGATTTGGATCCACAGGCAGAGCCAAGGGAA
GGTGTGATTCTCTGAGGAAAGAGTGATTCTGATATATGTACTTGTACATTGGTGTGGACACATTTGCGCCAAA
AGTATGGTAATTCTATTATTAAATAATTCTCTGAG

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FIGURE 2694

MRPVRLMKVFVTRRIPAEGRVALARAADCEVEQWDSDEPIPAKELERGVAGAHGLLCLLSDHVDKRILDAAGANL
KVISTMSVGIDHLALDEIKKRGIRVGYTPDVLTDTTAE LAVSLLLTTCRRLPEAIEEVKNGGWTSWKPLWL CGYG
LTQSTVGIIGLGRIGQAIARRLKPFQVQRFlytGRQPRPEEAAEFQAEFVSTPELAAQSDFIVVACSLTPATEGL
CNKDDFFQMKETAVFINISRGDVVNQDDLYQALASGKIAAAGLDVTSPEPLPTNHPLTLKNCVILPHIGSATHR
TRNTMSLLAANNLLAGLRGEPMPSELKL

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FIGURE 2695

AGTGTGAAATCTTCAGAGAAGAATTTCTCTTTAGTTCTTTGCAAGAAGGTAGAGATAAAGACACTTTTTCAAAA
TGGCAATGGTATCAGAATTCCTCAAGCAGGCCTGGTTTATTGAAAATGAAGAGCAGGAATATGTTCAAACTGTGA
AGTCATCCAAAGGTGGTCCCGGATCAGCGGTGAGCCCTATCCTACCTTCAATCCATCCTCGGATGTCGCTGCCT
TGCATAAGGCCATAATGGTTAAAGGTGTGGATGAAGCAACCATCATTGACATTCTAACTAAGCGAAACAATGCAC
AGCGTCAACAGATCAAAGCAGCATATCTCCAGGAAACAGGAAAGCCCTGGATGAAACACTTAAGAAAGCCCTTA
CAGGTCACCTTGAGGAGGTTGTTTTAGCTCTGCTAAAACTCCAGCGCAATTTGATGCTGATGAACCTCGTGCTG
CCATGAAGGGCCTTGGAACGTGATGAAGATACTCTAATTGAGATTTTGGCATCAAGAACTAACAAAGAAATCAGAG
ACATTAACAGGGTCTACAGAGAGGAACGAAGAGAGATCTGGCCAAAGACATAACCTCAGACACATCTGGAGATT
TTCGGAACGCTTTGCTTTCTCTTGCTAAGGGTGACCGATCTGAGGACTTTGGTGTGAATGAAGACTTGGCTGATT
CAGATGCCAGGGCCTTGATGAAGCAGGAGAAAGGAGAAAGGGGACAGACGTAAACGTGTTCAATACCATCCTTA
CCACCAGAAGCTATCCACAACCTCGCAGAGTGTTTTAGAAATACACCAAGTACAGTAAGCATGACATGAACAAAG
TTCTGGACCTGGAGTTGAAAGGTGACATTGAGAAATGCCTCACAGCTATCGTGAAGTGCGCCACAAGCAAACCG
CTTTCTTTGCAGAGAAGCTTCATCAAGCCATGAAAGGTGTTGGAACCTCGCCATAAGGCATTGATCAGGATTATGG
TTTCCCGTTCTGAAATTGACATGAATGATATCAAAGCATTCTATCAGAAGATGTATGGTATCTCCCTTTGCCAAG
CCATCCTGGATGAAACCAAAGGAGATTATGAGAAAATCCTGGTGGCTCTTTGTGGAGGAACTTAAACATTCCCTT
GATGGTCTCAAGCTATGATCAGAAGACTTTAATTATATATTTTCATCCTATAAGCTTAAATAGGAAAGTTTCTTC
AACAGGATTACAGTGTAGCTACCTACATGCTGAAAAATATAGCCTTTAAATCATTTTTATATTATAACTCTGTAT
AATAGAGATAAGTCCATTTTTTAAAAATGTTTTCCCAAACCATAAAACCCTATACAAGTTGTTCTAGTAACAAT
ACATGAGAAAGATGTCTATGTAGCTGAAAATAAAATGACGTCACAAGAC

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FIGURE 2696

MAMVSEFLKQAWFIENEEQEYVQTVKSSKGGPGSAVSPYP TFNPSSDVAALHKAIMVKGVDEATI IDILTKRNNA
QRQQIKAAYLQETGKPLDETLKKALTGHLEEVVLALLKTPAQFDADELRAAMKGLGTDEDTLIEILASRTNKEIR
DINRVYREELKRD LAKDITS DTSGDFRNALLSLAKGDRSEDFGVNEDLADSDARALYEAGERRKGT DVNVFNTIL
TTRSYPQLRRVFQKYTKYSKHD MNKVL DLELKGDI EKCLTAIVKCATSKPAFFAEK LHQAMKGVGTRHKALIRIM
VSRSEIDMNDIKAFYQKMYGISLCQAILDET KGDYEKILVALCGGN

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FIGURE 2697

TTTCCGCGCTACCTACAGAGGGGCCCATACGGCGTTGTTCTGGATTCCCGTCGTAACCTTAAAGGGAACTTTCAC
AATGTCCGGAGCCCTTGATGTCCTGCAAATGAAGGAGGAGGATGTCCTTAAGTTCCTTGCAGCAGGAACCCACTT
AGGTGGCACCAATCTTGACTTCCAGATGGAACAGTACATCTGTAAAAGGAAAAGTAATGGCATCTATATCATAAA
TCTGAAGAGGACCTGGGAGAAGCTTCTGCTGGCAGCTAGTGCTATTGTTGCCATTGAAAACCCTGCTGATGTCAG
TGTTATATCCTCCAGGAATACTGGCCAGAGGGCTGTGCTGAAGTTTGCTGCTGCCACTGGAGCCACTCCAATTGC
TGGCCACTTCACTCCTGGAACCTTCACTAACAGATCCAGGCAGCCTTCCGGGAGCCATGGCTTCTTGTGGTTAC
TGACCCAGGGCTGACCACCAGCCTCTCACGGAGGCATCTTATGTTAACCTACCTACCATTGCTCTGTGTAACAC
AGATTCTCCTATGCGCTATGTGGACATTGCCATCCCATGCAACAACAAGGGAGCTCACTCAGTGGGTTTGATGTG
GTAGATGCTGGCTCGGGAAGTTCTGCGCATGTGTAGCACGATTTCTATGACCACCCGTGGGAGGTCATGCCTGA
TCTCTACTTCTACAGAGATCCTGAAGATATTGAAAAAGAAGAGCAGGCTGCTGCTGAAAAGGCAGTGACCAAGGA
GGAATTTCAGGGTGAATGGACTGCTCCAGCTCCTGAGTTCACTGCTACTCAGCCTGAGGTTGCAGACTGGTCTGA
AGGTGTACAGGTGCCCTCTGTGCCTATTACAGCAGTTCCTACTGAAGACTGGAGCGCTCAGCCTGCCACGGAAGA
CTGGTCTGCAGCTCCCACTGCTCAGGCCACTGAATGGGTAGGAGCAACCACTGACTGGTCTTAAGCTGTTCTTGC
ATAGGCTCTTAAGCAACATGGAAAAATGGTTGATGGAAAATAAACATCAGTTTCT

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FIGURE 2698

MSGALDVLQMKEEDVLKFLAAGTHLGGTNLDFQMEQYICKRKSNNGIYIINLKRTWEKLLLAASAIVAIENPADVS
VISSRNTGQRAVLKFAAATGATPIAGHFTPGTFTNQIQAAFREPWLLVVDPRADHQPLTEASYVNLPTIALCNT
DSPMRYVDIAIPCNNKGAHSVGLMWRMLAREVLRMCSTISYDHPWEVMPDLYFYRDPEDIEKEEQAAAEKAVTKE
EFQGEWTAPAPEFTATQPEVADWSEGVQVPSVPIQQFPTEDWSAQPATDWSAAPTQAQATEWVGATTDWS

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FIGURE 2699

CAGAGGGGCCCATACGGCGTTGTTCTGGATTCCCGTCGTAACTTAAAGGGAACTTTCACAATGTCCGGAGCCCT
TGATGTCCTGCAAATGAAGGAGGAGGATGTCCTTAAGTTCCTTGACAGCAGGAACCCACTTAGGTGGCACC AATCT
TGACTTCCAGATGGAACAGTACATCTGTAAAAGGAAAAGTAATGGCATCTATATCATAAATCTGAAGAGGACCTG
GGAGAAGCTTCTGCTGGCTTCACTCCTGGAACCTTACTAACCAGATCCAGGCAGCCTTCCGGGAGCCATGGCTT
CTTGTGGTTACTGACCCCAGGGCTGACCACCAGCCTCTCACGGAGGCATCTTATGTTAACCTACCTACCATTGCT
CTGTGTAACACAGATTCTCCTATGCGCTATGTGGACATTGCCATCCCATGCAACAACAAGGGAGCTCACTCAGTG
GGTTTGATGTGGTAGATGCTGGCTCGGGAAGTTCTGCGCATGTGTAGCACGATTTCTATGACCACCCGTGGGAG
GTCATGCCTGATCTCTACTTCTACAGAGATCCTGAAGATATTGAAAAAGAAGAGCAGGCTGCTGCTGAAAAGGCA
GTGACCAAGGAGGAATTT CAGGGTGAATGGACTGCTCCAGCTCCTGAGTTCAGTGCTACTCAGCCTGAGGTTGCA
GACTGGTCTGAAGGTGTACAGGTGCCCTCTGTGC

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FIGURE 2700

GGGAAACTTTTACAAATGTCCGGAGCCCTTGATGTCTGCAAATGAAGGAGGAGGATGTCCTTAAGTTCCTTGCA
CAGGAACCCACTTAGGTGGCACCATCTTGACTTCCAGATGGAACAGTACATCTGTAAAAGGAAAAGTAATGGCA
TCTATATCATAAATCTGAAGAGGACCTGGGAGAAGCTTCTGCTGGCAGCTAGTGCTATTGTTGCCATTGAAAACC
CTGCTGATGTCAGTGTTATATCCTCCAGGAATACTGGCCAGAGGGCTGTGCTGAAGTTTGCTGCTGCCACTGGAG
CCACTCCAATTGCTGGCCACTTCACTCCTGGAACCTTCACTAACCAGACACGGAGGCATCTTATGTTAACCTACC
TACCATTGCTCTGTGTAACACAGATTCTCCTATGCGCTATGTGGACATTGCCATCCCATGCAACAACAAGGGAGC
TCACTCAGTGGGTTTGATGTGGTAGATGCTGGCTCGGGAAGTTCTGCGCATGTGTAGCACGATTTCTATGACCA
CCCGTGGGAGGTCATGCCTGATCTCTACTTCTACAGAGATCCTGAAGATATTGAAAAAGAAGAGCAGGCTGCTGC
TGA

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FIGURE 2701

GGCACGAGGGCCAGGAACGCCAGCCGTTACGCGTTCGGTCCTCCTTGGCTGACTCACCGCCCTCGCCGCCGCAC
CATGGACGCCCCCAGGCAGGTGGTCAACTTTGGGCCTGGTCCCGCCAAGCTGCCGCACTCAGTGTTGTTAGAGAT
ACAAAAGGAATTATTAGACTACAAAGGAGTTGGCATTAGTGTTCTTGAAATGAGTCACAGGTCATCAGATTTTGC
CAAGATTATTAACAATACAGAGAATCTTGTCGGGAATTGCTAGCTGTTCCAGACAATAAGGTGATTTTCT
GCAAGGAGGTGGGTGCGGCCAGTTCAGTGCTGTCCCCTTAAACCTCATTGGCTTGAAAGCAGGAAGGTGTGCGGA
CTATGTGGTGACAGGAGCTTGGTCAGCTAAGGCCGAGAAGAAGCCAAGAAGTTTGGGACTATAAATATCGTTCA
CCCTAACTTGGGAGTTATACAAAAATTCCAGATCCAAGCACCTGGAACCTCAACCCAGATGCCTCCTACGTGTA
TTATTGCGCAAATGAGACGGTGCATGGTGTGGAGTTTGACTTTATACCCGATGTCAAGGGAGCAGTACTGGTTTG
TGACATGTCTCAAACCTTCTGTCCAAGCCAGTGATGTTTCCAAGTTTGGTGTGATTTTTGCTGGTGCCAGAA
GAATGTTGGCTCTGCTGGGGTCACCGTGGTGATTGTCCGTGATGACCTGCTGGGGTTTGCCCTCCGAGAGTGCC
CTCGGTCTGGAATACAAGGTGCAGGCTGGAAACAGCTCCTTGTAACACGCTCCATGTTTCAGCATCTACGT
CATGGGCTTGGTCTGGAGTGGATTAAAAACAATGGAGGTGCCGCGCCATGGAGAAGCTTAGCTCCATCAAATC
TCAAACAATTTATGAGATTATTGATAATTCTCAAGGATTCTACGTGTCTGTGGGAGGCATCCGGGCCTCTCTGTA
TAATGCTGTCACAATTGAAGACGTTCAGAAGCTGGCCGCTTCATGAAAAAATTTTGGAGATGCATCAGCTATG
AACACATCCTAACCAGGATATACTCTGTTCTTGAACAACATACAAAGTTTAAAGTAACTTGGGGATGGCTACAAA
AAGTTAACACAGTATTTTTCTCAAATGAACATGTTTATTGCAGATTCTTCTTTTTTGAAGAACAACAGCAAAAC
ATCCACAACCTCTGTAAAGCTGGTGGGACCTAATGTCACCTTAATTCTGACTTGAAGTGAAGCATTTTAAGAAAT
CTTGTGCTTTTCTAACAAATCCCGCGTATTTTGCCTTTGCTGCTACTTTTTCTAGTTAGATTTCAAACCTTGCC
TGTGGACTTAATAATGCAAGTTGCGATTAAATTATTTCTGGAGTCATGGGAACACACAGCACAGAGGGTAGGGGG
CCCTCTAGGTGCTGAATCTACACATCTGTGGGGTCTCCTGGGTTACGCGGCTGTTGATTCAAGGTCAACATTGAC
CATTGGAGGAGTGGTTTAAAGAGTGCCAGGCGAAGGGCAAACCTGTAGATCGATCTTTATGCTGTTATTACAGGAGA
AGTGACATACTTTATATATGTTTATATTAGCAAGGTCTGTTTTAATACCATATACTTTATATTTCTATACATTT
ATATTTCTAATAATACAGTTATCACTGATATATGTAGACACTTTTAGAATTTATTAAATCCTTGACCTTGTGCAT
TATAGCATTCCATTAGCAAGAGTTGTACCCCTCCCGAGTCTTCGCCTTCCTCTTTTAAAGCTGTTTTATGAAAA
AGACCTAGAAGTTCTTGATTCATTTTTACCATTCTTTCCATAGGTAGAAGAGAAAGTTGATTGGTTGGTTGTTTT
TCAATTATGCCATTAAACTAAACATTTCTGTTAAATTACCCTATCCTTTGTTCTCTACTGTTTTCTTTGTAATGT
ATGACTACGAGAGTGATACTTTGCTGAAAAGTCTTTCCCTATTGTTTATCTATTGTCAGTATTTTATGTTGAAT
ATGTAAAGAACATTAAAGTCCTAAACATCTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2702

MDAPRQVVNFGPGPAKLPHSVLLEIQKELLDYKGVGISVLEMSHRSSDFAKIINNNTENLVRELLAVPDNYKVIFL
QGGGCGQFSAPVPLNLI GLKAGRCADYVVTGAWSAKAAEEAKKFGTINIVHPKLGSYTKIPDPSTWNLNPDASYVY
YCANETVHGVEFDFIPDVKGAVLVCDMSSNFLSKPVDVSKFGVIFAGAQKNVGSAGVTVVIVRDDL LGFALRECP
SVLEYKVQAGNSSLYNTPPCF SIYVMGLVLEWIKNNGGAAAMEKLSSIKSQTIYEIIDNSQGFYVSVGGIRASLY
NAVTIEDVQKLA AFMKKFL EMHQL

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FIGURE 2703

GGCACGAGGGCCAGGAACGCCAGCCGTTACGCGTTCGGTCCTCCTTGGCTGACTCACCGCCCTCGCCGCCGCAC
CATGGACGCCCCCAGGCAGGTGGTCAACTTTGGGCCTGGTCCCGCCAAGCTGCCGCACTCAGTGTTGTTAGAGAT
ACAAAAGGAATTATTAGACTACAAAGGAGTTGGCATTAGTGTTCTTGAAATGAGTCACAGGTCATCAGATTTTGC
CAAGATTATTAACAATACAGAGAATCTTGTGCGGGAATTGCTAGCTGTTCCAGACAACATAAGGTGATTTTTCT
GCAAGGAGGTGGGTGCGGCCAGTTCAGTGCTGTCCCCTTAAACCTCATTGGCTTGAAAGCAGGAAGGTGTGCGGA
CTATGTGGTGACAGGAGCTTGGTCAGCTAAGGCCGAGAAGAAGCCAAGAAGTTTGGGACTATAAATATCGTTCA
CCCTAAACTTGGGAGTTATACAAAAATTCCAGATCCAAGCACCTGGAACCTCAACCCAGATGCCTCCTACGTGTA
TTATTGCGCAAAATGAGACGGTGTCATGGTGTGGAGTTTGACTTTATACCCGATGTCAAGGGAGCAGTACTGGTTTG
TGACATGTCTCTCAAACTTCTGTCCAAGCCAGTGGATGTTTCCAAGTTTGGTGTGATTTTTGCTGGTGCCAGAA
GAATGTTGGCTCTGCTGGGGTCACCGTGGTGATTGTCCGTGATGACCTGCTGGGGTTTGCCCTCCGAGAGTGCC
CTCGGTCTTGAATACAAGGTGCAGGCTGGAACAGCTCCTTGTAACACGCCTCCATGTTTCAGCATCTACGT
CATGGGCTTGGTTCTGGAGTGGATTAAAAACAATGGAGGTGCCGCGGCCATGGAGAAGCTTAGCTCCATCAAATC
TCAAACAATTTATGAGATTATTGATAATTCTCAAGGATTCTACGTTTGTCCAGTGGAGCCCCAAAATAGAAGCAA
GATGAATATTCCATTCCGCATTGGCAATGCCAAAGGAGATGATGCTTTAGAAAAAGATTTCTTGATAAAGCTCT
TGAACCTCAATATGTTGCTCTGAAAGGGCATAGGTCTGTGGGAGGCATCCGGGCCTCTCTGTATAATGCTGTAC
AATTGAAGACGTTCAGAAGCTGGCCGCCTTCATGAAAAAATTTTGGAGATGCATCAGCTAT**CGA**ACACATCCTAA
CCAGGATATACTCTGTTCTTGAACAACATACAAAGTTTAAAGTAACTTGGGGATGGCTACAAAAAGTTAACACAG
TATTTTTCTCAAATGAACATGTTTATTGCAGATTCTTCTTTTTTGAAAGAACAACAGCAAAACATCCACAACCTCT
GTAAAGCTGGTGGGACCTAATGTCACCTTAATTCTGACTTGAACCTGGAAAGCATTTTAAGAAATCTTGTTGCTTTT
CTAACAAATTCCCGCGTATTTTGCCTTTGCTGTACTTTTTCTAGTTAGATTTCAAACCTTGCTGTGGACTTAAT
AATGCAAGTTGCGATTAATTATTTCTGGAGTCATGGGAACACACAGCACAGAGGGTAGGGGGGCCCTCTAGGTGC
TGAATCTACACATCTGTGGGGTCTCCTGGGTTACAGCGGCTGTTGATTCAAGGTCAACATTGACCATTGGAGGAGT
GGTTTAAAGAGTGCCAGGCGAAGGGCAAACCTGTAGATCGATCTTTATGCTGTTATTACAGGAGAAGTGACATACTT
TATATATGTTTATATTAGCAAGGTCTGTTTTTAATACCATATACTTTATATTCTATACATTTATATTCTAATA
ATACAGTTATCACTGATATATGTAGACACTTTTAGAATTTATTAATCCTTGACCTTGTCATTATAGCATTCCA
TTAGCAAGAGTTGTACCCCTCCCGAGTCTTCGCCTTCCTCTTTTAAAGCTGTTTTATGAAAAAGACCTAGAAGT
TCTTGATTCATTTTTACCATTCTTTCCATAGGTAGAAGAGAAAGTTGATTGGTTGGTTGTTTTCAATTATGCCA
TTAAACTAAACATTTCTGTTAAATTACCCTATCCTTTGTTCTCTACTGTTTTCTTTGTAATGTATGACTACGAGA
GTGATACTTTGCTGAAAAGTCTTTCCCCTATTGTTTATCTATTGTCAGTATTTTATGTTGAATATGTAAAGAACA
TTAAAGTCCTAAACATCTAAAAA

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FIGURE 2704

MDAPRQVVNF GFGPAKLPHSVLLEIQKELLDYKGVGISVLEMSHRSSDFAKIINNNTENLVRELLAVPDNYKVIFL
QGGGCGQFSAVPLNLIGLKAGRCADYVVTGAWSAKAAEEAKKFGTINIVHPKLGSYTKIPDPSTWNLNPDASYVY
YCANETVHGVEFDFIPDVKGAVLVCDMSSNFLSKPVDVSKFGVIFAGAQKNVGSAGVTVVIVRDDLGLGFAALRECP
SVLEYKVQAGNSSLYNTPPCFSIYVMGLVLEWIKNNGGAAAMEKLSSIKSQTIYEIIDNSQGFYVCPVEPQNRSK
MNIPFRIGNAKGDDALEKRFLDKALELNMLSLKGHRVGGIRASLYNAVTTIEDVQKLA AFMKKFLEMHQL

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FIGURE 2705

ATGGTGGAAAAGGAGCAAAGACATAGTCGGAATGAATGGGAAGGTTGGTATAATGGACCCAAATCTCTTGTTTCA
AAACAAGTTAAGGAAAATTGTTTTAAAAATCCTAAACACTCAGTCTGTGAATATGATCCTGGGTCCTCTCAGAAC
TGCCAACATTCTAACACCAGCTGGCACCAGAGACCCTGCTCTGAGGTGAGGGATGATGTGAGCAAGTGGTCTAAT
AATTCCTCAGAACTCTTTTTCTCATTCTTCTTCCCTCTCTTCCCTCTTCTGCCTTACCAAGAACAGAGAAATGGTC
TTTCTTAAAGAAGAAGAAAAGAGGACTCCAACCGTAAGAATTGAGTACAAGGAGTTGCTCAGTGATGTGAAGCTG
AAGAGGGCATCTGAGGAGATGAGCTGTAAAACATATTACAAGAGGGACGTGTGAAGGGAGTGACCATTCCGAAG
AACCCAGACAGCTGCCCCACAGGAGAAGGATGCCATCCCAAAGATGAATCAGAGTTTCCATGAGCAAAAGAGCCTT
GTGAGTCGTCGGCAAAGCCTGAGTCCTGTCTTTTCGCTCTCTCTCCCCGACAGTATGAGCTTCACCACTCGCTCC
ACCTTCTCCACCAACTACCGGTCCCTGGGCTCTGTCCAGGCGCCAGCTACGGCGCCCGGCCTATAGACAATGCC
CATCTTGCTGCTGATGACTGTAGAGTCAAGTATGAGACAGAAGTGGCCATGCACCAAGTCTGTGGAGAAAGACATC
CATGGGCTCCACAAGGTGATCGATGACACCAATGTCACTTGGCTGCAGGTGGAGACACAGATCGAGGCTCTCAAG
GAGGAGCTCTTTCATGAAGAAGAACCACGAATAGGAAATAAAAGGCCCAAGCTCAGATTGCCAGCTCTGGGTT
GACAGTGGAGTGGTCCCCATGCAGCCCGCCAAGGTGCGAGCTGCTGAGATGATGCTCACTGAGCCGAGATGCACA
GTCCAGTCTTCGGAGGTGACCTGGAATCGATGAGAAATCTGAAGGCTAGCTTGGGGAACAGCCTGAGGGAGGTG
GAGGCCTGCTACACCGTGAAGATGGAGCAGCTCGACGGAATCGTGCCACACTTGGAGTCAGAGCTGGCACAGACC
TGGGCAGAGGAACAGTGCCAGGCCCAGCAGTACGAGGCCCTGATGAACATCAAGGTCAAGTTGGAGGCTGAGATC
ACCACCTACTGCTGCCTGCTGAAAGATGGCGAGGACGTCAATCTTGGTGATACCCTGGACAGCAGCAACTCCATG
CAAACCATCCAAAAGACCACCACCTGCCAGACAGTGGATGGCAAAGTGGTGTCTGAGACCAAAGATACCAAAGTT
CTGAGGCATTACACCAGCAGAAATTACAACCTGCATGGCCCAGGAAAGGCGCAATGGCAAAGAAACAGGAAGTGAT
TCTTACAGTGGGGAACCCCTGGAAGCTGAGGATGCCAAAGCCGTAAGACTTAACATCTCCAAGTCATCATTCGAG
GTGTTAATGCTGGAAGCTACAGAGAAGATGACAGGTTCCCTCATTAATGTGA

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FIGURE 2706

MVEKEQRHSRNEWEGWYNGPKSLVSKQVKENC FKNPKHSVCEYDPGSSQNCQHSNTSWHQRPCSEVRDDVSKWSN
NSSEFFSFFFPLFLFCLTKNREMVFLKEEEKRTPTVRIEYKELLSDVKLKRASEEMSCKTYSQEGRVKGVTIPK
NPDSCPQEKDAIPKMNQSFHEQKSLVSRRQSLSPVLSLSSPDSMSFTTRSTFSTNYRSLGSGVQAPSYGARPIDNA
HLAADD CRVKYETELAMHQSVEKDIHGLHKVIDDTNVTWLQVETQIEALKEELFHEEEPRIGNKRPTSSDCQLWV
DSGVVPMQPAKVGAAEMMLTEPRCTVQSSEVDLES MRNLKASLGNLREVEACYTVKMEQLDGIVPHLESELAQT
WAEEQCAQQYEALMNIKVLEAEITTYCCLLDGEDVNLGDTLDSSNSMQTIQKTTTCQTVDGKVVSETKDTKV
LRHYTSRNYNCMAQERRNGKETGSDSYSGEPLAEDAKAVRLNISKSSFVLMLEATEKMTGSSLM

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FIGURE 2707

ACAGAGCCCCGGCCGCCGCCAGAGCGATGTTCCCGCAGAGCCGGCACCCGACGCCGCACCAGGCTGCAGGCCAGC
CCTTCAAGTTCACATATCCCGGAGTCCCTGGACCGGATTAAAGAGGAATTCCAGTTCCTGCAGGCGCAGTATCACA
GCCTTAAATTGGAATGTGAGAACTGGCAAGTGAAAAGACAGAAATGCAGAGGCACTATGTGATGTATTATGAAA
TGTCATATGGATTAAACATTGAAATGCACAAACAGACTGAAATCGCCAAGAGATTGAATACGATTTGTGCACAAG
TCATCCCATTCTGTCTCAGGAACATCAACAACAGGTGGCCCAGGCTGTTGAACGTGCCAAACAGGTGACCATGG
CAGAATTGAATGCCATCATCGGGCAGCAGCAGTTGCAAGCTCAGCATCTTTCTCATGGCCACGGACCCCCAGTTC
CCCTTACGCCTCACCCCTTCGGGACTTCAGCCTCCTGGAATCCCGCCCCCTCGGGGGCAGTGCCGGCCCTTCTTGCGC
TGTCTAGTGCTCTGAGTGGGCAGTCTCACTTGGAATAAAAGATGACAAGAAGCACCACGATGCAGAGCACCACA
GAGGTGAGAGGCCGGGCAAGAGTAATTCCCTCCTGGTCCCAGACAGTCTAAGAGGCACAGATAAACGCAGAAATG
GACCTGAATTTTCCAATGACATCAAGAAAAGGAAGGTGGATGATAAGGACTCCAGCCACTATGACAGTGATGGTG
ACAAAAGCGATGACAACTTAGTTGTGGATGTGTCTAATGAGGACCCCTTCTTCTCCGCGAGCAAGCCCTGCCCACT
CGCCCCGGGAAAATGGAATCGACAAAAATCGCCTGCTAAAGAAGGATGCTTCTAGCAGTCCAGCTTCCACGGCCT
CCTCGGCAAGTTCCACTTCTTTGAAATCCAAAGAAATGAGCTTGCAATGAAAAAGCCAGCAGCCTGTTCTGAAAT
CCAGCACACCAACGCCTCGGAGCGACATGCCAACCGCGGGCACCAGCGCCACTCCAGGCCTCCGTCCAGGTCTCG
GCAAGCCTCCAGCCATAGACCCCTCGTTAACCAAGCGGCAGCTGGCTTGAGGACACCCCTGGCAGTGCCCGGCC
CATATCCTGCTCCTTTTGGGATGGTCCCCACGCTGGCATGAACGGCGAGCTGACCAGCCCAGGCGCTGCCTACG
CCAGTTTACACAACATGTCGCCCCAGATGAGCGCCGACGCCGCCGCGCGCCGCGCTGGTGGCCTACGGGCGCTCCC
CCAIGGTGGGGTTTGATCCTCCCCCTCACATGAGAGTACCTACCATTCTCTCCAAACCTGGCAGGAATCCCTGGGG
GGAAACCTGCATACTCCTTCCACGTTACTGCAGACGGTCAGATGCAGCCTGTCCCTTTTCCCCCGACGCCCTCA
TCGGACCCGGAATCCCCCGGCATGCTCGCCAGATCAACACCTCAACCACGGGGAGGTGGTGTGCGCTGTGACCA
TCAGCAACCCACGAGACACGTGTACACAGGCGGGAAGGGCTGCGTCAAGGTCTGGGACATCAGCCACCCTGGCA
ATAAGAGCCCTGTCTCCAGCTCGACTGTCTGAACAGAGACAATTATATCCGTTCTCTGTAAATTGCTACCCGATG
GCTGCACTCTCATAGTGGGAGGGGAAGCCAGTACTTTGTCCATTGGGACCTGGCGGCTCCAACCCGCGCATCA
AGGCGGAGCTGACGTCTCGGCCCCCGCTGCTACGCCCTGGCCATCAGCCCCGATTCCAAGGTCTGCTTCTCAT
GCTGCAGCGACGGCAACATCGCTGTGTGGGATCTGCACAACCAGACACTAGTGAGGCAATTCCAGGGCCACACAG
ACGGAGCCAGCTGTATTGACATTTCTAATGATGGCACCAGCTCTGGACGGGTGGTTTGGACAACACAGTCAGGT
CCTGGGACCTGCGCGAGGGGCGGCAGCTGCAGCAGCAGACTTCACCTCCCAGATCTTCTCCCTGGGGTACTGCC
CCACCGGGGAGTGGCTGGCAGTGGGCATGGAGAGCAGCAATGTGGAGGTGCTGCACGTGAACAAGCCTGACAAGT
ACCAGCTGCACCTGCATGAGAGCTGCGTGCTGTCCCTGAAATTTGCTTACTGTGGTAAATGGTTTGTGAGTACTG
GAAAAGATAACCTCCTCAATGCTTGGCGGACCCCTATGGAGCCAGCATATTCCAGTCCAAAGAGTCCCTCGTCAG
TGCTTAGCTGTGACATCTCTGTGGATGATAAGTACATAGTCACTGGCTCGGGGGACAAGAAGGCTACAGTCTATG
AAGTCATCTACTGAAAACATTATGTGGT

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FIGURE 2708

CGGCAGTCTCGCGCGGCTACTGCAGCACTGGGGTGTCAAGTTGTTGGTCCGACCCAGAACGCTTCAGTTCTGCTCT
GCAAGGATATATAATAACTGATTGGTGTGCCCCGTTTAAATAAAAGAATATGGAACTGAACAGCCAGAAGAAACCT
TCCCTAACACTGAAACCAATGGTGAATTTGGTAAACGCCCTGCAGAAGATATGGAAGAGGAACAAGCATTAAAA
GATCTAGAAACACTGATGAGATGGTTGAATTACGCATTCTGCTTCAGAGCAAGAATGCTGGGGCAGTGATTGGAA
AAGGAGGCAAGAATATTAAGGCTCTCCGTACAGACTACAATGCCAGTGTTTCAGTCCCAGACAGCAGTGGCCCCG
AGCGCATATTGAGTATCAGTGCTGATATTGAAACAATTGGAGAAATTCGAAGAAAATCATCCCTACCTTGGAAAG
AGGGCCTGCAGTTGCCATCACCCACTGCAACCAGCCAGCTCCCGCTCGAATCTGATGCTGIGGAATGCTTAAATT
ACCAACACTATAAAGGAAGTGACTTTGACTGCGAGTTGAGGCTGTTGATTCAATCAGAGTCTAGCAGGAGGAATTA
TTGGGGTCAAAGGTGCTAAAATCAAAGAAGTTCGAGAGAACACTCAAACCACCATCAAGCTTTTCCAGGAATGCT
GTCTCATTCCTGACAGAGTTGTTCTTATTGGAGGAAAACCCGATAGGGTTGTAGAGTGCATAAAGATCATCC
TTGATCTTATATCTGAGTCTCCCATCAAAGGACGTGCACAGCCTTATGATCCCAATTTTTACGATGAAACCTATG
ATTATGGTGGTTTTACAATGATGTTTGATGACCGTCGCGGACGCCAGTGGGATTTCCCATGCGGGGAAGAGGTG
GTTTTGACAGAAATGCCTCCTGGTCGGGGTGGGCGTCCCATGCCTCCATCTAGAAGAGATTATGATGATATGAGCC
CTCGTCGAGGACCCTCCCCCTCCTCCCGGACGAGGCGGCGGGGTGGTAGCAGAGCTCGGAATCTTCCTCTTC
CTCCACCACCACCACCTAGAGGGGAGACCTCATGGCCTATGACAGAAGAGGGAGACCTGGAGACCGTTACGACG
GCATGGTTGGTTTCAGTGCTGATGAACTTGGGACTCTGCAATAGATACATGGAGCCCATCAGAATGGCAGATGG
CTTATGAACCACAGGGTGGCTCCGGATATGATTATTCCTATGCAGGGGGTCTGGCTCATATGGTGATCTTGGTG
GACCTATTATTACTACACAAGTAAGTATTCCCAAAGATTTGGCTGGATCTATTATTGGCAAAGGTGGTCAGCGGA
TTAAACAAATCCGTGATGATCGGGAGCTTCGATCAAAATTGATGAGCCTTTAGAAGGATCCGAAGATCGGATCA
TTACCATTACAGGAACACAGGACCAGATACAGAATGCACAGTATTTGCTGCAGAACAGTGTGAAGCAGTATGCAG
ATGTTGAAGGATCTAAATGCAAGATATTTTTCTTTTTTATAGTGTGAAGCAGTATTCTGGAAAGTTTTTCTAAG
ACTAGTGAAGAACTGAAGGAGTCCGTCATCTTTTTTTTTTATCTGCTTCTGTTTAAAAAGCCAACATTCCTCTG
CTTCATAGGTGTTCTGCATTTGAGGTGTAGTGAAATCTTTGCTGTTACCAGATGTAATGTTTTAGTTCCTTACA
AACAGGGTTGGGGGGGGGAAGGGCGTGCAAAACTAACATTGAAATTTTGAACAGCAGCAGAGTGAGTGGATTT
TATTTTTCGTTATTGTTGGTGGTTTTAAAAAATCCCCCATGTAATTATTGTGAACACCTTGCTTTGTGGTCACT
GTAACATTTGGGGGGTGGGACAGGGAGGAAAAGTAACAATAGTCCACATGTCCTGGCATCTGTTTCAGAGCAGTG
TGCAGAATGTAATGCTCTTTTGTAAAGAAACGTTTTATGATTTTTAAAAATAAATTTAGTGAACCTATTTTTGGTG
TCATTTTTTTTTTAAGACAGTCATTTTAAATGGTGGCTGAATTTCCCAACCCACCCCAACTAAACACTAAGT
TTAATTTTCAGTCCCTCGTTGGACATATAAGTGCATCTCTGTTGGACATAGGCAAAATAACTTGGCAAACCTTA
GTTCTGGTGATTTCTTGATGGTTTGAAGTCTATTGCTGGGAAGAAATTCATCATACATATTCATGCTTATAAT
AAGCTGGGGATTTTTGTTTGTGTTTGGCAAATGCTTGCCCTACTTTTCAACAATTTCTATGTTAGTTGTGAAG
AACTAAGGTGGGGAGCAGTACTACAAGTTGAGTAATGGTATGAGTATATACCAGAATCTGATTGGCAGCAAGTT
TATTAATCAGAATAACACTTGGTTATGGAAGTGAATAATGCTGAAAAAATTGATTATTTTTATTAGATAAATTTCT
CACCTATAGACTTAACTGTCAATTTGCTCTAGTGTCTTATTAGTTAACTTTGTAAATATATATATACTTGT
TTTCCATTGTATGCAATTGAAAGAAAAAGATGTACCATTTCTCTGTTGTATGTTGGATTAGTAGGAATGTTTG
TGTACAATTCAAAAAAGATGAAAAAGTTCTGTGGATGTTTTGTGTAGTATCTTGGCATTGTATTGA
TAGTTAAATTCACCTTCCAAATAAATAAAACACCCATGATGCTAG

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FIGURE 2709

METEQPEETFPNTETNGEFGKRPAEDMEEEQAFKRSRNTDEMVELRILLQSKNAGAVIGKGGKNIKALRTDYNAS
VSVPDSSGPERILSISADIETIGEILKKIIPITLEEGLQLPSPTATSQLPLESDAVECLNYQHYKGSDFDCELRL
IHQSLAGGIIGVKGAKIKELRENTQTTIKLFQECCPHSTDRVVLIGGKPD RVVEC IKI ILDLISESPIKGRAPY
DPNFYDETYDYGGFTMMFDDRGRFVGFP MRGRGGFDRMPFGRGGRPMPPSRDYDDMSPRRGPPPPPPGRGGRG
GSRARNLPLPPPPPPRGDL MAYDRRGRPGDRYDGMVGF SADETWDS AIDTWSPSEWQ MAYEPQGGSGYDYSYAG
GRGSYGD LGGP I ITTQVTIPKDLAGSIIGKGGQRIKQIRHESGASIKIDEPLEGSEDRIITITGTQDQIQNAQYL
LQNSVKQYADVEGF

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FIGURE 2710

AAAAAGGAAGTGGGAGCGCGCCGCGGCGGTTCTGTCTTACAGTTGCGCTGCCAGGGACCGATGTTGCGCGAG
GAAAATGCGGGACGCCAGGTGCGTGCTCGGCCAGACTTATGCCCGTGTTCACAGCCCACACTCGTGCCCGA
AGCCCCCTTACCCCGCCCCGGGCTGTGGTCTGTGGGCTGTGGGACGAGCTGCGGCGCGGGCCATTCTGAGCAGTG
GAGGTTTCAAGTAATCCACTAACAACAGTTCCAAATCTGTCTCATCAATCCTGTGCTGCTGTTCTCGTGGTAA
TAGATGCATATTATTTCTTTTATTTAAAGAAATGAATGTGACTAGTATTGCATTAAGAGCTGAAACTTGGCTTT
TAGCTGCATGGCATGTTAAAGTACCTCCGATGTGGCTGGAAGCTTGTATTAAGTGGATTCAAGAAGAAAATAATA
ATGTTAACTTGAGTCAGGCCCAAATGAATAACAAGTGTGTGAGCAGTGGCTCCTTACTGATCTGAGGGATTGG
AGCATCCTCTTTTACCCGATGGCATTTTAGAAATTCAAAAGGAGAATTAAATGGATTTTATGCTCTGCAGATTA
ATTCTTGGTTGATGTAAGTCAGCTGCATACTCCAGATACAGAAGTTGAGAGGAAAGAATACAACAAATGATC
TAGTTACAGCTGAAGCACAAGTAACCCCAAACCTTGGGAAGCAAAGCCTTCACGAATGTTGATGCTGCAGCTAA
CTGATGGAATCGTACAAATACAGGGAATGGAATATCAGCCTATTCCAATTCTTCATAGTGATCTTCTCCAGGTA
CAAAAATTTTGATTTATGGAATATATCTTTCCGTCTTGGTGTCTCTTATTGAAACCAGAAAACGTGAAAGTGT
TAGGAGGTGAAGTAGATGCTCTTTTGAAGAATATGCCAAGAAAAGTACTTGCAAGATTAATAGGGGAACCTG
ATCTTGTAGTTTCAGTCATACCAACAATTCTAACGAAAACATTCCCAGAGTTACAGATGTTCTAGATCCTGCAT
TAGGTCTTCTGATGAAGAAGTCTTGGCAAGTCTTGATGAAAATGATGAGCTTACAGCAAATAATGACACTTCT
CAGAACGATGTTTACCACAGGTAGTTCTCAATACCATTCCCACAAGACAGTCAAGTTTTGAGCCAGAATTTG
TTATTTCTCCAAGACCAAAAGAGGAACCATCAACCTATCTATACATGTAATGGATGGAGAATTAGATGACTTTT
CACTGGAGGAGGCCTTGCTTTTGAAGAACTGTCCAGAAAGAACAGATGGAAGTAAAGGAATTGCAACCATGGA
CTTTTAACAGAAATGCCGATCGAAGTATAGAGAGATTTTACATAATCCTAATACTACGAATAACTTTTCTTTGA
CTTGCAAAAATGGAACAATAATTGGAGTGAAAAAATGTATCTGAACAAATGACTAATGAAGACAAATCATTG
GTTGTCCATCTGTTAGAGACCAAAACAGGAGTATTTTTTCAGTTTCAATTGTAATGTACCCTTAGCCCATGATTTTA
CAAATAAAGAAAAGAACTTAGAGACAGATAATAAAATAAAACAAACAGCAGTTCAGATAGCCATTCTTAAATA
ATAAAATATTAAATAGAGAGGTGGTCAACTATGTACAGAAAAGGAATTCACAAATTTCTAATGAAAATGATTGTA
ATTTACAGAGTTGTCTTTAAGATCATCAGAGAATAGCATTAACTTTCTATTGCCATGGATTTGTATTCTCCAC
CCTTTGTCTATTTGTCTGTTCTAATGGCCAGCAAACCAAAGGAAGTTACAACAGTGAAAGTGAAAGCATTATTG
TAACCTTAAGTGGAAATCTCTCAAGTTCTGGTGGTATTTGGAGTATAACTGCAAAGGTGTCTGATGGTACTGCAT
ATCTAGATGTAGACTTTGTGGATGAAATACTTACTAGCTTGATAGGGTTCTCAGTACCAGAAATGAAACAGTCAA
AAAAGGATCCTCTTCAATACCAAAAGTTTCTGGAAGGGTTGCAGAAATGTCAAAGAGATCTAATAGATTTGTGCT
GTCTAATGACTATTTTCAATTAATCCTTCTTGTCTAAAGCAATGGTACTGGCATTACAAGATGTTAATATGGAAC
ACCTTGAGAAATCTAAAGAAGCGGTTAAATAAATAATTAAGTAAATAGTATTAGGAACAATTAACAAACAAAG
GAAATATTTAGAATTTGTTCACAATTTTACTTATGATACTTTGTGTAAAAAGGAAAAATGAAATTTCATAGCTTA
TTTCAGTTTAAATTTTAAAGTGTTTAATCATGTTTGTATATGTGGAGCTTTTGAATAAGTTAATCTTTTTTTT
TTTTTTTTTAATGTCAGGGTATTGCTCTGTTGCCAGGCTAGAGTGCAGTGGCATGATCATAGGTTATTGCATCA
ACCTCTTGAGCTCAAGCGATCCTCCTGCCTTAGCCTCTTGAGTTGCTGGGACTATAGGCATGTACCACCATGCC
AGCTAATTTATAATTACTATTATTGTTTTGTAGGGACAGAGTTTTGCTATGTTGCCAGATTGGTCTCAAACCTC
TGGCCTCTCACTCCTGCCGTATGGCCTCCAAAGTTTACTTTTTTAAAGTAACTGTTAGATGGAGGAATATGG
TGACCCACTATTGTTGAGAAATTTGTTTTCCACTTGTCTACGTACATAAGATGATTGCTAAAATATTGTACTGGT
GTTGCGTGGTGAGTCATTTTTTGAAGTTAATAATTATAAATAGGTAATTTCTTCTAATATGTTGGTACTGTC
TATGGCCATACCAACCTGAACATGCCTGAGCTTGTCTATAATATGTTGAGTACCCAAAAGATTTGTTTATATTGTT
AATCTTAGGGAAAAAAATTAATCCAGTAGATCAGAATCAGGCTTTCAGATACAAATGATTTACTGGTTT
TTATTTTGTGATTATAATATTGGTATATTAAAGTAACTAGTTAACTAGATGCTATTTCTATAGATTATATTG
AATGATTTAAACTTTATTTTCAAGGATAGTTTATTTTAAATGGCATATTGAAACATCATTATTAAGATCCAGT
AGGTAGGACATTATTGGATTAAATGAAGCATTTATCTATGTCTTAGGTGTCATTGTTCCCTTTCTGAATTAG
CTGTACATATAAGCCTTCTTTGGTTTTTAAGTACTGATTTTTTTTTTAAAAAAGAGGGACTGTTTACCATTCTT
CCACTGTGCTGTATAAAGTTGTATTTGAAGGTAATGTTGTTTTTTATTAATCTTTTGTCTTAAATAATTTAA
GTGCTTTGAATTTTAAACATTAAACAAATCCTTAAATAAC

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FIGURE 2711

TGCTCCGGAGGGCACGGGCTCCGTAGTCACCAACTGCAAGGCCCCCTCCCCCTGCGGGCGCTCCCCCTGGCACAAT
TCGCGTTTCGAGAGTGACCTGCACTCGCTGCTTCAACTGGATGCACCCATCCCCAATGCACCCCCTGCTCGCTGGC
AGCGCAAAGCCAAGAAAGCCACAGGCCCGGCCCCCTCACCCATGCGGGCCGCCAACCGATCCACAGCGCCAGCA
GGACTCCGGGCGCAACTCCTGGCAAATCCAGTTCCAAGGTTGAGACCACTCCTAGCAAACCTGGCGGTGACCGCT
ATATCCCCCATCGCAGTGCTGCCAGATGGAGGTTGCCAGCTTCCTCCTGAGCAAGGAGAACCAGCCTGAAAACA
GCCAGACGCCCACCAAGAAGGAACATCAGAAAGCCTGGACTTTGAACCTGAACGGTTTTGATGTAGAGGAAGCCA
AGATCCTTCGGCTCAGTGGAACACAAAATGCGCCAGAGGGTTACCAGAACAGACTGAAAGTACTCTACAGCC
AAAAGGCCACTCCTGGCTCCAGCCGGAAGACCTACCATTACATTCCCTCCCTGCCAGACCATAACCTGGATGCCC
CTGAAATCCGAAATGACTACTACCTGAATCTTGTGGACTGGAGCTCTGGGAATGTATTGGCCGTGGCGCTGGACA
ACAGTGTGTACCTGTGGAGCGCAAGCTCTGGTGACATCCTGCAGCTTTTGCAAATGGAGCAGACTGGGAAATATG
TATCCTCTGCGGCCTGGATCAAAGAGGGCAACTACTTGGCTGTGGGCATCAGCAGTGCTGAGGTGCAGCTTTGGG
ATGTGCAGCAGCAGAAACGGCTTCGAAATATGACCATTCACTCTGCCCAGTGGGCTCCCTAAGCTGGAACAGCT
ATATCCTATCCAGTGGTTTACATTCTGGCCACATCCACCACCATGATGTTTCGGGTAGCAGAACACCACGTGGCCA
CACTGAGTGGCCACAGCCAGGAAGTGTGTGGGCTGCGCTGGGTCCAGATGGACGACATTTGGCCAGTGGTGGCA
ATGATAACTTGGTCAAAGTGTGGCCTAGTGCTCTTGGAGAGGGTGGCTGGGTTCCTCTGCAGACATTACCCCTTC
AAGGGGCTGTCAAGGCCGTAGCATGGTGTCCCTGGAAGTCCAATGTCCCGGCAACAGGAGGGGGCACCAGTGATC
GACACATTTGCATCTGGAACGTGTGCTCTGGGGCCTGTCTGAGTGCCGTGGATGCCCTTTCCCAGGTGTGCTCCA
CCCTCTGGTCTCCCCACTACAAGGAGCTCATCTCAGGCCATGGCTTTGCACAGAACCAGCTGGTTATTTGGAAGT
ACCCAACCATGGCCAAGGTGGCTGAACTCAAAGGTACACATCCCGGGTCCTGACTCTGACCATGAGCCCAGATG
GGGCCACAGTGGCATCTGCAGCAGCAGATGAGACCCCGAGGCTATGGCACIGTTTTGAGTTGGACCCGTGTGTGGC
GGCGGGAGCGGGAGAAGGCCAGTGCAGCCAAAAGCAGCTTCATCCACCAAGGCATCCGCTGAAGACCAACCCCTC
GCCTCAGTTGTTTTTTATTTTTCTAATAAAGTCATGTCTCCCTTCA

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FIGURE 2712

CTTTCCCAGCCCCAGCCCGGCCCTTGCAGCTGCAGAGATGTTGATGCCTAAGAAGAACCGGATTGCCATTTATGA
ACTCCTTTTTTAAGGAGGGAGTCATGGTGGCCAAGAAGGATGTCCACATGCCTAAGCACCCGGAGCTGGCAGACAA
GAATGTGCCCAACCTTCATGTCATGAAGGCCATGCAGTTTCTCAAGTCCCGAGGCTATGTGAAGGAACAGTTTGC
CTGGAGACATTTCTACTGGTATCTTACCAATGAGGGTATCCAGTATCTCCGTGATTACCTTCATCTGCCCCAGA
GATTGTGCCTGCCACCCTATGCCGTAGCCGTCCAGAGACTGGCAGGCCCTCGGCCTAAAGGTCTGGAGATTGAGCG
ACCTACGAGACTCGCAAGAGGGGAAGCTGACAGAGATACCCACAGATGAGTGTGTGCCACCTGGTGCCGGCAAG
AAAGCTGAGGCTGGGGCTGGGTGAGCAACCGAATTCCAGTTTAGAGGCGGATTGGTTCATGGACGTGGTCAGCCA
CCTCAGTAAAATTGGAGAGGATTCTTTTGCATTGAATAAACTTACAGCCAAAAATCCTTAAAA

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FIGURE 2713

MLMPKKNRIAIYELLFKEGVMVAKKDVHMPKHPELADKNVPNLHVMKAMQFLKSRGYVKEQFAWRHFYWYLTNEG
IQYLRDYLHLPPEIVPATLCRSRPETGRPRPKGLEIERPTRLARGEADRDTHR

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FIGURE 2714

AGTCTCCGGCGAGTTGTTGCCTGGGCTGGACGTGGTTTTTGTCTGCTGCGCCCGCTCTTCGCGCTCTCGTTTCATT
TTCTGCAGCGCGCCACGAGGATGCGCCCAACAAGCAGATCTACTACTCGGACAAGTACTTCGACGAACACTACGAGT
ACCGGCATGTTATGTTACCCAGAGAACTTTCCAAACAAGTACCTAAAACTCATCTGATGTCTGAAGAGGAGTGGA
GGAGACTTGGTGTCCAACAGAGTCTAGGCTGGGTTTCATTACATGATTTCATGAGCCAGAACCACATATTCTTCTCT
TTAGACGACCTCTTCCAAAAGATCAACAAAAATGAAGTTTATCTGGGGATCGTCAAATCTTTTTCAAATTTAATG
TATATGTGTATATAAGGTAGTATTCAGTGAATACTTGAGAAATGTACAAATCTTTCATCCATACCTGTGCATGAG
CTGTATTCTTCACAGCAACAGAGCTCAGTTAAATGCAACTGCAAGTAGGTTACTGTAAGATGTTTAAGATAAAAG
TTCTTCCAGTCAGTTTTTCTCTTAAGTGCCGTGTTGAGTTTACTGAAACAGTTTACTTTTGTTCATAAAGTTTG
TATGTTGCATTTAAAAAAAAAAAAAAAAAAAA

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FIGURE 2715

MAHKQIYYSDKYFDEHYEYRHVMLPRELSKQVPKTHLMSEEEWRRLGVQQSLGWVHYMIHEPEPHILLFRRPLPK
DQQK

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FIGURE 2716A

CGGGCAGCGTGGACCCCGGATGAGTTGCTTTTAGGCTTGCTGGCCCCGCGGGGCTGTCCAGGCACGCGAGGCCCCCT
CAACAAAATGCTTCAACAAGTTCCAGAAAACATAAATTTTCTGCTGAAGAAGAGAAAATCTTGGAGTTTTGGAC
TGAATTTAATTGTTTTTCAGGAATGCTTAAAGCAATCAAAACATAAACCAAAATTTACCTTCTATGATGGTCTCTCC
TTTTGCAACTGGACTGCCTCACTATGGACATATACTTGCGGGTACAATTAAGATATAGTTACAAGATATGCTCA
CCAGAGTGGGTTTCATGTTGACAGAAGATTTGGATGGGATTGCCATGGCTTACCTGTGGAATATGAAATTGATAA
GACACTGGGAATCAGAGGACCAGAGGATGTGGCCAAAATGGGGATTACAGAGTATAACAATCAGTGCCGAGCAAT
TGTGATGAGATATTCTGCTGAGTGGAAAGTCTACTGTTAGCAGACTTGGCCGATGGATTGACTTTGACAATGACTA
TAAACTCTGTATCCACAATTCATGGAATCAGTCTGGTGGGTCTTCAAACAACCTCTATGATAAAGGCCCTTGTTTTA
TAGAGGTGTGAAAGTCATGCCCTTCTCTACGGCATGTAACACTCCACTTTCCAACCTTCGAGTACACCAGAATTA
TAAGGATGTTCAAGATCCTTCAGTATTTGTAACCTTTCCCTTTGGAAGAAGATGAACTGTATCTTTAGTTGCTTG
GACAACCACTCCCTGGACTCTACCTAGTAACCTTGCTGTGTGTGTTAATCCAGAAATGCAATATGTGAAAATTAA
AGATGTTGCCAGAGGACGATTACTCATTTTAATGGAAGCCAGATTGTCAGCCCTCTATAAATTGGAGAGTGACTA
TGAGATCCTTGAAAGATTTCTGGTGCCTATCTTAAAGGCAAGAAGTACAGGCCCTTGTTTACTATTTCTCTGAA
GTGTAAAGAGAATGGCGCTTTCACGTGTGCTTGTGACAACATATGTGAAGGAAGAAGAAGGCACAGGGGTTGTCCA
CCAAGCTCCTTACTTCGGTGTGAGGACTATCGGCTCTGTATGGACTTTAACATTATTTCGGAAGACTCACTCCC
TGTTTTGCCCTGTGGATGCTTCAGGCTGCTTCACAACGGAGGTGACAGATTTCGCAGGACAGTATGTGAAGGATGC
TGACAAAAGTATCATCAGGACTTTGAAGGAACAAGGCCGACTTCTGTTGCCACCACCTTCACTCACAGTACCC
TTTTTGCTGGAGATCAGACACTCCTCTAATTTACAAAGCAGTGCCAGCTGGTTTGTGCGAGTGGAGAACATGGT
GGACCAGCTCCTAAGGAACAATGACCTGTGCTACTGGGTCCCAGAGTTGGTACGAGAAAAACGATTTGGAAATTG
GCTGAAAGATGCACGTGACTGGACAATTTCCAGAAACAGATACTGGGGCACCCCCATCCCCTGTGGGTGACGGA
TGACTTTGAGGAGGTGGTATGCATTGGGTGAGTGGCGGAACCTGAAGAACTGTCAGGAGCAAAGATCTCAGATCT
CCACAGAGAGAGTGTGACCACCTGACCATTCCCTTCACGCTGTGGGAAGGGATCCTTGACCCGCATCTCTGAAGT
GTTTGACTGTTGGTTTGAGAGTGGCAGCATGCCCTATGCTCAGGTTTATTACCCGTTTGAAAACAAGAGGGAGTT
TGAGGATGCTTTTCTGAGATTTTATTGCGGAGGGCATCGACCAAACAGAGGATGGTTTTATACCTGTCTGGT
GCTGGCCACGGCCCTCTTTGGACAACCGCCTTTCAAGAACGTAATTGTGAATGGGCTTGTCTGGCAAGTGATGG
CCAAAAAATGAGCAAACGGAAAAAGAATTATCCAGATCCAGTTTCCATCATCCAGAAGTATGGTGCTGATGCCCT
CAGATTATATCTGATTAACTCCCCTGTGGTGAGAGCAGAAAACCTCCGCTTTAAAGAAGAGGGTGTGCGGGACGT
CCTTAAGGATGTACTGCTCCCATGGTACAATGCCTATCGCTTCTTAATCCAGAACGTTCTGAGGCTCCAGAAGGA
GGAAGAAATAGAATTTCTCTACAATGAGAACCGGTAGAGAAAGCCCCAACATTACAGACCGGTGGATCCTGTCT
CTTCATGCAGTCTCTCATTGGCTTCTTTGAGACTGAAATGGCAGCTTATAGGCTTTTACTGTGGTGCCTCGCCT
GGTCAAGTTTGTAGATATTCTGACCAATTGGTATGTTAGAATGAACCGCAGAAGATTAAAGGGTGAAAATGGGAT
GGAGGATTGTGTCAITGGCCCTAGAAACCTTGTTTAGTGTTCTGCTTTCTCTTTCAGACTTATAGTCCCTACAC
ACCTTTTCTCACTGAATTGATGTACCAGAATCTAAAGGTGCTGATTGACCCTGTTTCTGTTTCAGGACAAGGACAC
ACTCAGCATTCACTACCTCATGCTGCCCCGTGTTTCGAGAAGAATTGATTGACAAGAAAACAGAGAGTGCAGTATC
TCAGATGCAGTCTGTGATTGAACTTGGAAGAGTGATCAGAGACCGAAAAACTATTCCCATAAAGTATCCTTTGAA
AGAAATTGTGGTTATCCATCAAGATCCAGAAGCTCTTAAAGATATCAAGTCTTTGGAGAAGTATATCATTGAGGA
ACTCAATGTTTCGAAAAGTTACTGTCTACAGATAAAAAACAAGTATGGCATTTCGGCTAAGGGCAGAACCAGATCA
CATGGTCTTGGGGAAGCGTCTGAAGGGAGCCTTTAAGGCAGTGATGACGTCCATCAAGCAGTTGAGCAGTGAGGA
GCTGGAGCAGTTCCAGAAGACTGGGACCATTTGTGTGGAAGGCCATGAATTGCACGATGAAGACATCCGCCTCAT
GTACACCTTTGATCAGGCCACAGGTGGGACTGCGCAATTTGAAGCACACTCAGATGCTCAGGCTTTGGTCTCTT
AGATGTCACTCCTGACCAGTCAATGGTAGATGAAGGAATGGCTCGGGAAGTCATCAATCGCATAACAGAACTTCG
CAAAAAGTGCAATCTGGTTCCAACCTGATGAAATCACAGTGTACTATAAAGCAAAGTCTGAAGGAACATATCTGAA
TAGTGTTATTGAAAGCCACACAGAGTTCATATTTACCACCATAAAGGCTCCCTTGAAACCATATCCAGTTTCTCC
ATCGGATAAAGTCCTTATTCAAGAAAAAACACAGTTGAAGGGATCTGAACTGGAAATTACACTCACCAGAGGATC
TTCCCTTCCCTGGTCTGTGTGATATGTCAATCTTAACATTTGTGCAAATGGCAGTGAACAAGGTGGAGTATT
GCTCCTGGAATAATCCAAAAGGTGACAATAGGTTGGACCTTTTAAAGCTGAAGAGTGTGTGCTACTAGCATTTTGG
TGTGAAAAATACAGAGCTGGCTGTCTTCCATGATGAAACAGAAATACAAAACCAAAGTACTTACTGAGTCTTAG
TGGAAAAACACTTTGTGTGACTGCAGGATCGGCTCCCTCTCTGATCAACAGTTCTAGTACTCTTCTTTGTGAGTA

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FIGURE 2716B

TATCAACCTACAGCTCCTGAATGCAAAGCCACAAGAGTGTTTAATGGGGACAGTGGGCACTCTCCTGCTTGAAAA
CCCACCTTGGGCAGAATGGACTCACCCACCAAGGTCTTCTGTATGAAGCAGCCAAGGTGTTTGGCCTTCGGAGCAG
GAAGCTAAAGCTGTTTCTGAATGAGACCCAAACGCAGGAAATTACAGAAGACATCCCCGTGAAGACTTTGAATAT
GAAGACTGTGTATGTTTCTGTGTTACCAACAACAGCAGACTTCTAGCATGTACTTATCAATGTTGTTTCGGTCAGC
CCTTCCCTAATTACACCTATCCCCTACACATACATGCACATAGACACACACATGAACACACTGAAGATAATTCCT
TCAGGTGTGTGTAATAATATGCTGCTTGGATTGAAATTCAAATGGGATTGATTAGTCAAGTAACTTGAGACCTCAC
AGTAATCTTCACACTTAACCTTAGACACCTATGCAGTCATGTTGGGAGCAGGTTACAATGTTACTTCAGCCCACA
GTTTATTTCTATTCTTGAGTTCCTTAAGTACAGAAGATAGAAGTGATTTAAATGGCATAGTATATATATCATTTTC
TGGCCTTTTAAATTTATTTGAGACCTCTTGATGAAATGGACATATTATATATTTCTGCCACCTGGATTTTCCTG
GATAATTTGATGGAATATTTTAAGTTTCAGTAAATCAGAACAATAAACAACTCAGATAT

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FIGURE 2717

MLQQVPENINFPAAEEKILEFWTEFNCFQECLKQSKHKPKFTFYDGPPFATGLPHYGHILAGTIKDIVTRYAHQS
GFHVDRRF'GWDCHGLPVEYEIDKTLGIRGPEDVAKMGITEYNNQCRAIVMRYSAEWKSTVSRLGRWIDFDNDYKT
LYPQFMESVWWVFKQLYDKGLVYRGVKVMPFSTACNTPLSNFESHQNYKDVQDPSVFVTFPLEEDETIVSLVAWTT
TPWTLPSNLAVCVNPEMQYVKIKDVARGRLILMEARLSALYKLES DY EILERFPGAYLKGKKYRPLFDYFLKCK
ENGAF'TVLVDNYVKEEETG'GVVHQAPYF'GAEDYRVCMDFN'IIRKDSL'PVC'PVDASGCF'TTEV'TDFAGQYVKDADK
SIIRTLKEQGRLLVATTFTHSY'PFCWRS'DTPLIYKAVPSWFVRVENMVDQLLRNNDLCYWVPELVREKRF'GNWLK
DARDWTISRNR'YWGTP'IP'LVWSDDFEEVVCIGSVAE'LEELSGAKISDLHRESVDHLTIPSR'CGKGS'LSHRISEVFD
CWFESGSM'PYAQVHY'PFENKREFEDAF'PADFIAEGIDQTRGW'FYTLLVLATALFGQPPFKNVIVNGLV'LASDGQK
MSKRKKNYPDPVSI IQKYGADALRLYLINSPV'VRAENLRFKEEGVRDVLKDVL'LPWYNAYRFLIQNVLRLQKEE
IEFLYNENTVRES'PNITDRWILSFMQSLIGFFETEMAAYR'LYTVV'PRLVKFVDILT'N'WYVRMNRRLKGENGMED
CVMALET'LF'SVLLSLCR'LIAPYTPFLTEL'MYQNLKVLIDPVS'VQDKD'TLSIHYLMLPRVREELIDKKTESAVSQM
QSVIELGRVIRDRKTIPIKYPLKEIVVIHQDPEALKD'IKSLEKYIIEELNVRKVTLS'DKNKYGIRLRAEPDHMV
LGKRLKGAFKAVMTS'IKQLSSEELEQFQKTGTIVVEGHE'LDHEDIRLMYT'FDQATGGTAQFEAHSDAQALVLLDV
TPDQSMVDEGMAREVINRIQ'LRKKCNLVP'TDEITVY'YKAKSEGTYLNSVIESHTEFIFTTIKAPLKPYPVSPSD
KVLIQEKTQLKGSELEITL'TRGSSLP'GPACAYVNLNICANGSEQGGVLLLENPKGDNRLDLLKLKSVVTSIFGVK
NTELAVFHDETEIQNTD'LLSLSGKTL'CVTAGSAPSLINSSSTLLCQYINLQLLNAKPQECLMGT'VGTLLLENPL
GQNGLTHQGLLYEAAKV'FGLRSRKLKFLNETQTQEITEDIPVKT'LNMKTVYVSVLP'TTADF

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FIGURE 2718A

CGGGCAGCGTGGACCCCGGATGAGTTGCTTTTAGGCTTGCTGGCCCGGGGCTGTCCAGGCACGCGAGGCCCCCT
CAGGTACGCCCTCTCTTCCCTGCAGGATCCGGCCCTCAAAGACGAGGGTCACGCACGCGTTACAACCCCGAAACA
GTAGCACAAAGATTTAATTTTTTAAAGAGCGTGTTCCTCGGGGCTTGCCGTTCTGTTCCAGCCTCAGGAAT
TTATGGTCGCCTTTTTGAATGAGCAACAAATGCTTCAACAAGTTCAGAAAACATAAATTTTCCTGCTGAAGAA
GAGAAAATCTTGGAGTTTTGGACTGAATTTAATTGTTTTAGGAATGCTTAAAGCAATCAAACATAAACCAAAA
TTTACCTTCTATGATGGTCCTCCTTTTGCAACTGGACTGCCTCACTATGGACATACTTGCGGGTACAATTAAA
GATATAGTTACAAGATATGCTCACCAGAGTGGGTTTCATGTTGACAGAAGATTGGATGGGATTGCCATGGCTTA
CCTGTGGAATATGAAATTGATAAGACACTGGGAATCAGAGGACCAGAGGATGTGGCCAAATGGGGATTACAGAG
TATAACAATCAGTGCCGAGCAATTGTGATGAGATATTCTGCTGAGTGGAAAGTCTACTGTTAGCAGACTTGGCCGA
TGGATTGACTTTGACAATGACTATAAACTCTGTATCCACAATTCATGGAATCAGTCTGGTGGGTCTTCAAACAA
CTCTATGATAAAGGCCTTGTTTATAGAGGTGTGAAAGTCATGCCCTTCTCTACGGCATGTAACACTCCACTTTCC
AACTTCGAGTCACACCAGAATTATAAGGATGTTCAAGATCCTTCAGTATTTGTAACTTTCCCTTTGGAAGAAGAT
GAAACTGTATCTTTAGTTGCTTGGACAACCACTCCCTGGACTCTACCTAGTAACCTTGCTGTGTGTGTTAATCCA
GAAATGCAATATGTGAAAATTAAAGATGTTGCCAGAGGACGATTACTCATTTTAATGGAAGCCAGATTGTCAGCC
CTCTATAAATTGGAGAGTGACTATGAGATCCTTGAAAGATTTCTGGTGCCTATCTTAAAGGCAAGAGTACAGG
CCCCTGTTTGACTATTTCTGAAGTGTAAGAGAATGGCGCTTTCAGTGTGCTTGTGACAACATATGTGAAGGAA
GAAGAAGGCACAGGGGTTGTCCACCAAGCTCCTTACTTCGGTGCTGAGGACTATCGGGTCTGTATGGACTTTAAC
ATTATTCGGAAGACTCACTCCCTGTTTGCCCTGTGGATGCTTCAGGCTGCTTCACAACGGAGGTGACAGATTTT
GCAGGACAGTATGTGAAGGATGCTGACAAAAGTATCATCAGGACTTTGAAGGAACAAGGCCGACTTCTGGTTGCC
ACCACCTTCACTCACAGCTACCCTTTTTGCTGGAGATCAGACACTCCTCTAATTTACAAAGCAGTGCCACAGTGG
TTTGTGCGAGTGGAGAACATGGTGGACCAGCTCCTAAGGAACAATGACCTGTGCTACTGGGTCCCAGAGTTGGTA
CGAGAAAAACGATTTGGAAATTGGCTGAAAGATGCACGTGACTGGACAATTTCCAGAAACAGATACTGGGGCACC
CCCATCCCCTGTGGGTGAGCGATGACTTTGAGGAGGTGGTATGCATTGGGTGAGTGGCGGAACCTGAAGAACTG
TCAGGAGCAAAGATCTCAGATCTCCACAGAGAGAGTGTGACCACCTGACCATTCTTCACGCTGTGGGAAGGGA
TCCTTGCACCGCATCTCTGAAGTGTTTGACTGTTGGTTTGAGAGTGGCAGCATGCCCTATGCTCAGGTTTCATTAC
CCGTTTGAAAAACAAGAGGGAGTTTGAGGATGCTTTTCTGTCAGATTTTATTGCCGAGGGCATCGACCAACCAGA
GGATGGTTTTTATACCTTGCTGGTGTGCTGGCCACGGCCCTCTTTGGACAACCGCCTTTCAAGAACGTAATTGTGAAT
GGGCTTGTCTGGCAAGTGATGGCCAAAAAATGAGCAAACGGAAAAAGAATTATCCAGATCCAGTTTCCATCATC
CAGAAGTATGGTGTGATGCCCTCAGATTATATCTGATTAACCTCCCTGTGGTGAGAGCAGAAAACCTCCGCTTT
AAAGAAGAGGGTGTGCGGGACGTCCTTAAGGATGTACTGCTCCCATGGTACAATGCCTATCGCTTCTTAATCCAG
AACGTTCTGAGGCTCCAGAAGGAGGAAGAAATAGAATTTCTCTACAATGAGAACACGGTTAGAGAAAGCCCCAAC
ATTACAGACCGGTGGATCCTGTCTTTCATGCAGTCTCTCATTGGCTTCTTTGAGACTGAAATGGCAGCTTATAGG
CTTTATACTGTGGTGCCTCGCCTGGTCAAGTTTGTAGATATTCTGACCAATTGGTATGTTAGAATGAACCGCAGA
AGATTAAAGGGTGAAAATGGGATGGAGGATTGTGTCTATGGCCCTAGAAACCTTGTTTAGTGTCTTGCTTTCTCTT
TGCAGACTTATAGCTCCCTACACACCTTTTCTCACTGAATTGATGTACCAGAATCTAAAGGTGCTGATTGACCCT
GTTTCTGTTGAGGACAAGGACACACTCAGCATTCACTACCTCATGCTGCCCCGTGTTTCGAGAAGAATTGATTGAC
AAGAAAACAGAGAGTGAGTATCTCAGATGCAGTCTGTGATTGAACCTTGAAGAGTGATCAGAGACCGAAAAACT
ATTCCCATAAAGTATCCTTTGAAAGAAATTGTGGTTATCCATCAAGATCCAGAAGCTCTTAAAGATATCAAGTCT
TTGGAGAAGTATATCATTGAGGAACCAATGTTTCGAAAAGTTACACTGTCTACAGATAAAAACAAGTATGGCATT
CGGCTAAGGGCAGAACAGATCACATGGTCTGGGGAAGCGTCTGAAGGGAGCCTTTAAGGCAGTGATGACGTCC
ATCAAGCAGTTGAGCAGTGAGGAGCTGGAGCAGTTCCAGAAGACTGGGACCATTGTTGTGGAAGGCCATGAATTG
CACGATGAAGACATCCGCTCATGTACACCTTTGATCAGGCCACAGGTGGGACTGCGCAATTTGAAGCACACTCA
GATGCTCAGGCTTTGGTCCTCTTAGATGTCACTCCTGACCAGTCAATGGTAGATGAAGGAATGGCTCGGGAAGTC
ATCAATCGCATACAGAACTTCGCAAAAAGTGCAATCTGTTTCCAACCTGATGAAATCACAGTGACTATAAAGCA
AAGTCTGAAGGAACATATCTGAATAGTGTTATTGAAAGCCACACAGAGTTTATATTTACCACCATAAAGGCTCCC
TGAAACCATAATCCAGTTTCTCCATCGGATAAAGTCTTATTCAAGAAAAAACACAGTTGAAGGGATCTGAAGTG
GAAATTACACTCACCAGAGGATCTTCCCTTCCCTGGTCTGCTTGTGTCATATGTCAATCTTAACATTTGTGCAAT
GGCAGTGAACAAGGTGGAGTATTGCTCCTGGAAAATCCAAAAGGTGACAATAGGTTGGACCTTTTAAAGCTGAAG

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FIGURE 2718B

AGTGTGTGCTACTAGCATTTTTGGTGTGAAAAATACAGAGCTGGCTGTCTTCCATGATGAAACAGAAATACAAAAC
CAAACCTGACTTACTGAGTCTTAGTGGAAAAACACTTTGTGTGACTGCAGGATCGGCTCCCTCTCTGATCAACAGT
TCTAGTACTCTTCTTTGTGAGTATATCAACCTACAGCTCCTGAATGCAAAGCCACAAGAGTGTTTAATGGGGACA
GTGGGCACTCTCCTGCTTGAAAACCCACTTGGGCAGAATGGACTCACCCACCAAGGTCTTCTGTATGAAGCAGCC
AAGGTGTTTGGCCTTCGGAGCAGGAAGCTAAAGCTGTTTCTGAATGAGACCCAAACGCAGGAAATTACAGAAGAC
ATCCCCGTGAAGACTTTGAATATGAAGACTGTGTATGTTTCTGTGTTACCAACAACAGCAGACTTCTAGCATGTA
CTTATCAATGTTGTTTCGGTCAGCCCTTCCCTAATTACACCTATCCCCTACACATACATGCACATAGACACACACA
TGAACACACTGAAGATATTTCTTCAGGTGTGTGTAAATATGCTGCTTGGATTGAAATTCAAATGGGATTGATT
AGTCAAGTAACTTGAGACCTCACAGTAATCTTCACACTTAACCTTAGACACCTATGCAGTCATGTTGGGAGCAGG
TTACAATGTTACTTCAGCCACAGTTTATTTCTATTCTTGAGTTCTTAAGTAÇAGAAGATAGAAGTGATTTAAAT
GGCATAGTATATATATCATTTTTCTGGCCTTTTAAATTTATTTGAGACCTCTTGATGAAATGGACATATTATATA
TTTCTGCCACCTGGATTTTCTGGATAATTTGATGGAATATTTTAAGTTTCAGTAAATCAGAACAATAAACAAAC
TCAGATAT

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FIGURE 2719

MLQQVPENINFPAEEEEKILEFWTEFNCFQECLKQSKHKPKFTFYDGPPFATGLPHYGHILAGTIKDIVTRYAHQS
GFHVDRRFGWDCGGLPVEYEIDKTLGIRGPEDVAKMGITEYNNQCRAIVMRYSAEWKSTVSRLGRWIDFDNDYKT
LYPQFMESVWWVFKQLYDKGLVYRGVKVMPFSTACNTPLSNFESHQNYKDQDPSVFVTFPLEEDETIVSLVAWTT
TPWTLPSNLAVCVNPEMQYVKIKDVARGRLILMEARLSALYKLESDEYELERFPGAYLKGGKYRPLFDYFLKCK
ENGAFTVLVDNYVKEEEGTGVVHQAPYFGAEDYRVCMDFNIIRKDSLPCVPVDASGCFTTEVTDFAGQYVKDADK
SIIRTLKEQGRLLVATTFTHSYPFCWRSDTPLIYKAVPSWFVRVENMVDQLLRNNDLCYWPELVREKRFGNWLK
DARDWTISRNRWGTPIPLWVSDDFEEVVCIGSVAEELEELSGAKISDLHRESVDHLTIPSRCKGKSLHRISEVFD
CWFESGSMPIYAQVHYPFENKREFEDAFPADFAEGIDQTRGWFTLLVLATALFGQPPFKNVIVNGLVLASDGQK
MSKRKKNYPDVPSIIQKYGADALRLYLINSPVVRANLRFKEEGVRDVLKDVLLPWYNAYRFLIQNVLRQLQKEEE
IEFLYNENTVRESPNITDRWILSFMQSLIGFFETEMAAAYRLYTVVPRLVKFVDILTNNWYVRMNRRLKGENGMED
CVMALETLSVLLSLCRLIAPYTPFLTELMYQNLKVLIDPVSVDKDTLSIHYLMLPRVREELIDKKTESAVSQM
QSVIELGRVIRDRKTIPIKYPLKEIVVIHQDPEALKDIKSLEKYIIIEELNVRKVTLSTDKNKYGIRLRAEPDHMV
LGKRLKGAFKAVMTSIKQLSSEEELEQFQKTGTIVVEGHELHDEDIRLMYTFDQATGGTAQFEAHSDAQALVLLDV
TPDQSMVDEGMAREVINRIQKLKKNLVPDEITVYYKAKSEGTYLNSVIESHTEFIFTTIKAPLKPYVPVSPSD
KVLIQEKTQLKGSELEITLTRGSSLPGPACAYVNLNICANGSEQGGVLLLENPKGDNRLDLLKLKSVVTSIFGVK
NTELAVFHDETEIQNTDLLSLSGKTLCTAGSAPSLINSSSTLLCQYINLQLLNAKPQECLMGTGVTLLLENPL
GQNGLTHQGLLYEAAKVFGLRSRKLKFLNETQTQEITEDIPVKTLMKTVYVSVLPPTADF

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FIGURE 2720A

TGAGGAGGGCCCCGGCCTGCGAGAGCCTCAGTGGGAGCCGGCTCAGCCCTCGGCCACCATGTCGGCGCCGTGCGAG
GAGGAGGAGTACGCGCGGCTGGTGATGGAGGCGCAGCCGGAGTGGCTGCGCGCCGAGGTGAAGCGGCTGTCCAC
GAGCTGGCCGAGACCACGCGTGAGAAGATCCAGGCGGCCGAGTACGGGCTGGCGGTGCTCGAGGAGAAGCACCAG
CTCAAGCTGCAGTTCGAGGAGCTCGAGGTGGACTATGAGGCTATCCGCAGCGAGATGGAGCAGCTCAAGGAGGCC
TTTGACAAGCACACACAAACCACAAGAAGGTGGCTGCTGACGGAGAGAGCCGGGAGGAGAGCCTGATCCAGGAG
TCGGCCTCCAAGGAGCAGTACTACGTGCGGAAGGTGCTAGAGCTGCAGACGGAGCTGAAGCAGTTGCGCAATGTC
CTCACCACACGCGAGTCGGAGAATGAGCGCCTGGCCTCTGTGGCCCAGGAGCTGAAGGAGATCAACCAGAATGTG
GAGATCCAGCGTGGCCGCCTGCGGGATGACATCAAGGAGTACAAATTCCGGGAAGCTCGTCTGCTGCAGGACTAC
TCGGAAGTGGAGGAGGAGAACATCAGCCTGCAGAAGCAAGTGTCTGTGCTCAGACAGAACCAGGTGGAGTTTGAG
GGCTCAAGCATGAGATCAAGCGTCTGGAGGAGGAGACCGAGTACCTCAACAGCCAGCTGGAGGATGCCATCCGC
CTCAAGGAGATCTCAGAGCGGCAGCTGGAGGAGGCGCTGGAGACCCTGAAGACGGAGCGCGAACAAGAACAGC
CTGCGCAAGGAGCTGTCACTACATGAGCATCAATGACTCCTTCTACACCAGCCACCTGCATGTCTCGCTGGAT
GGCTCAAGTTTCAGTGACGATGCTGCCGAGCCCAACAACGATGCCGAGGCCCTGGTCAATGGCTTTGAGCACGGC
GGCTGGCCAAGCTGCCACTGGACAACAAGACCTCCACGCCCAAGAAGGAGGGCCTCGCACCGCCCTCCCCAGC
CTCGTCTCCGACCTACTCAGTGAGCTCAACATCTCTGAGATCCAGAAGCTGAAGCAGCAGCTGATGCAGATGGAG
CGGGAAGGCGGGCCTGCTGGCAACGCTGCAGGACACACAGAAGCAGCTGGAGCACACGCGGGGCTCCCTGTCA
GAACAGCAGGAGAAGGTGACCCGCTCAGAGAGAATCTGAGTGCCCTGCGGCGCCTGCAGGCCAGCAAGGAGCGG
CAGACAGCCCTGGACAACGAGAAGGACCGTGACAGCCATGAGGATGGGACTACTACGAGGTGGACATCAACGGG
CCTGAGATCTTGGCTGCAAGTACCATGTGGCTGTGGCTGAGGCTGGCGAGCTCCGCGAGCAGCTCAAGGCACTG
CGCAGCACGCACGAGGCTCGTGAGGCCCAGCACGCCGAGGAGAAGGGCCGCTATGAGGCTGAGGGCCAGGCACTC
ACGGAGAAGGTCTCCCTGCTAGAGAAGGCCAGCCGCCAGGACCGCGAGCTGCTGGCCCCGGCTGGAGAAGGAGCTA
AAGAAGGTGAGCGACGTGCGCGGCGAGACACAGGGCAGCCTGAGTGTGGCCCAGGATGAGCTGGTGACCTTCACT
GAGGAGCTGGCCAATCTCTACCACCAGTGTGCATGTGCAACAATGAGACACCCAACCGTGTGATGCTGGACTAC
TACCGCGAGGGCCAGGGCGGGGCCGCCGACCAGTCCCGGGGGCCGCACCAGCCCCGAGGCGCGTGGCCGGCGC
TCACCCATCCTCTACCCAAGGGGCTGCTGGCTCCTGAGGCGGGCCGAGCAGATGGTGGGACGGGGACAGCAGC
CCCTCGCCTGGCTCCTCACTGCCATACCCCTGAGTGACCCAGCCGGGAGCCCCATGAACATCTACAACCTGATC
GCTATCATCCGTGACCAGATCAAGCACCTGCAGGCAGCCGTGGACCGCACCACGGAGCTGTACGCCAGCGCATT
GCCTCTCAGGAGCTGGGCCCCGCCGTGGACAAGGACAAGGAAGCGCTTATGGAGGAGATCCTCAAGCTGAAGTCG
CTGCTCAGCACCAAGCGGGAGCAGATCACCACGCTGCGCACTGTGCTCAAGGCCAACAAGCAGACGGCCGAGGTG
GCCCTTGCCAACCTGAAGAGCAAGTATGAGAATGAGAAGGCCATGGTTACCGAGACCATGATGAAGCTGCGCAAT
GAGCTCAAGGCCCTCAAGGAGGACGCGACCCACCTTCTCCTCGCTGCGTGCTATGTTTGCCACCAGGTGTGACGAG
TACATTACACAGCTGGATGAGATGCAGCGGCAGCTGGCGGCTGCTGAGGACGAGAAGAAGACGCTGAACCTCGCTG
CTGCGCATGGCCATCCAGCAGAAGCTGGCGCTGACCCAGCGGCTGGAGCTGCTCGAGCTGGACCATGAGCAGACC
CGGCGTGGCCGTGCCAAAGCCGCCCGAAGACCAAGCCAGCCACACCGAGCGTAAGTCACACCTGTGCCTGTGCC
AGCGACAGGGCCGAGGGCACCGGGCTGGCCAACCAGGTGTTCTGCAGCGAGAAGCACAGCATTACTGTGATTAG

GGGCTGTGGGGCGCCGACGCTGCAGCTAACATCTGCTTCACCTCAACTAACCCAGCAGCAGCGGGACGGCGGTG
CTAGGTCAATCTTAACGTGACTAATGCACAGAGGGTAGGAGTCTAGCCGAGGCGCCATGGGGCGTTGCATCAGCA
GGACACTTGTGAGAGCTTTGTGTGCTTCTCACTCCTCAAAGCCCCCTCAGGAGCACCCAGTCTCAGCTGCTCT
CTTAGGTGGGGGTGAGAGGTGGGGATAGAGCTGCACATTCTTGACGAGATGTGTGATGAAAGCATCTTCTAAGC
CCTGCGCACCCGTGGGGAAACCAAGGGAGGAGTCTGGTCTGCTCCCTCAGCACCCAAAAGGGGCAGAACCTG
AGTTGAGACTTGCATGTTTCTCGCATGTGTCTAATGTGACACTAGAAAGCAGTTTTAGGAGGTTCAGCCTGCA
GCATAGGTACGACCTCAGAGGATGGCTTTGCACTTGGCATAGTTTCATGGAAAGGAGTACGTTGTAGTTTATGCA
GTATCTGACTGCAATCATATTACAGGAAAGAAGTGAGAATTTCTTCCCCAAGCCAGAGAAGAGCAGCCCTGAG
CCCCTGTATTCTGCTGGCCAGACACATGGCACAGACACAGCTGACCATAACCCAGGAATCCAGAGCTCGGTTT
CTCATTTTCTGAGATCAGGATGCTTGTATAGTGGCCTGTGAGGTGACAGATTGGCAGGGCCCAAGGCCCAAGGTTT
TCATTTTTCTGAGAGAAAGCTTTCCAAGTGCTTGGCCAGACCTTGGTCCTTAGTGCAGAGGCCGTCTTTGTAC
TTGGGGTGACCCAGCAGCCAATTATCCGGCCTTCCATAGGGGGTTTCAAGTCCCAAGACATGGGGCTTTGAAAC
CCTAGCCTGAAGTCTGAGCCACCAAGGGCTTGGCTGGGTGGACACCCACAGGTGTATCCAGAGCCAGCCCGGT

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FIGURE 2720B

GCTGGGAAAGCTTTGCATAGGGCCAGGGCCACTTGTGAGGATTCACAGGTAGGAGATGTTTAGGTCTCTTTATTT
AGTGCAATCTGGGGGATGGCAACAGAGAAAAGGAAAGGTAGCTGTAGGGTTCTCCCATTTCCAGAGGCTCCATC
CACACCTGCCTTCCACATTCTGAGCAGAACTTTTCTCAGTACTTTTTTCCCGATCACCTGTGGGACCAGCTGG
ACCTGAGGCTGCAGTCTTCTCTCCTGCGAGGCTGCTTGCCTTGTCTCTCATGCGGAAGAGGCATTGAGTTACCTG
GTGAGAGACCGTGTGGCCCCCTCCACAGCTCTCTGCCCTGCGCGTTCTTCCCTTTGGTGCCGAGTATGTTTCGG
TCCCTCCAGACTCCAGGACACGCCCATGTATGTCCCTGCGTGTTCATCCTGGGCCCAGATCCCCCTGCCCCAG
CAAGACTCGCAGTGGGATGGCTGCTGGCATGCCACCCTGCATGCGCTTGGCCCTCTCCTTGCAAGCCTGGCACA
TAGCTTCTCTCCATACTCCTAAGGGACTTTGCAGACACCCAAGCCACTGGGACCCCTGCTAACACATGCAGGTCT
TCTCTTCTGCCAACTAACGTGCTGCGCCCCCTCCAGCAGTGGAGAGCTTCAATTGTCAGATAAACAGGAAGCGA
CAGATGACCGCTTTCTAACGCTCTCTTTTCTCCCGTTTTCAGCTGTAGAGTAGCTGCCAGGAGGACTTGGCCACC
CGGCCCTGTACACTGCAGCCCCCTTCCCTTCCCTCTCGTGGCCCAAGGAGGAAGGAAGGGCAACCTAAAAGC
CCACTTAGAACTTTTTGGATATGCCACTGCAATTCTTTCAAAATAGCATTCCCCAGGTTTTTAATGGGAGGAA
AAAAAGCTTTAATGTTGAGCATGCTGCGAGCTGCTGCGTGGAAAGGCCCTCTGTATGGGCCGAAGACCCCTTCTCC
CTGGCTGCCAGGCTCGCCAGGAGCCACTGGAACGCCACCACGGGGCTCCTTGTTACACATGTTCTTTTTTT
ATCCGATCAACCTGTGCACTTTTGATATTTTGATATTATATTGCTTCCTTAATTCCTCGCGTAGAGACGGTCTC
AGGTGCCGTGGTCTATGCTCGTGGTCTGTAGCTGTCCGCTCAGCTCCACCGTGTGTGTCTGGTGTGAGCAGC
AGGCAGAGCTGTGTGCTCCATAGCGTGTAGCTTTAGACTCGGAGATGAGTGTGTTGACCCAGCGAGGAGCTCAGC
TAAGTGTATCCACGCTGTGGTTCAGCAGCCTTTAGATCATACGGCATTGTGGTTCATGTTGAAATTACAGATTT
TAAATGCCATGTTCAATTAAGAAATCCAGGGTATTAGATTCTGGGGTTTTTCATATTGTATTATTATTATTCTTA
GGAATAGTTCAATGTAACAAGAAGAAAACCTTGACCTTTGCTCTGGTTAAAACAGTAATAGGCACTTGAAAAA
AGATAAATTATTGAATGAGTAGTATTACCTACAAATTCAGAAATTTCTGGGTTTTAGGACGTTGTGAAGCATGA
CTGATTAACAGAATTTTATACAAGTGTACCAATAAAATTCCAAATTGGAATTGTTTTGTTACTCTGGTTGTTGTG
CCAAATTGTGGTACACTTAGAAAATTCTACAGTCGTGATTTTTAGGGTGTCTCTTTCAACACCTTTTTGTTAG
TAATCATTGCCAGTAGTGCCTTCATCAGTTAAGGGAGGTGTCCAGCACAGATCATTTCAAAAGCGAGCAGGGA
AGAGCTAGTGGGCATGCTGAAGGCCAGCGTGGACAGCAGGTGAGGCAGGTGCTCCTCACACCCAGACCTGGGCAT
CTTCATTGAGGGAAAGAAAACAGTCATTGTGCAAAATTCGTTAGTCAGTGATTCTTTACTTGCAAAATTCAGGGG
CTTAGAAAATGAAAGCAACACAAAACCTTGAGTGTGCTTTGGGAACCAAATGGACCTTCTGGGACAAGCTGAGC
AAGCTGTATGAACGCCACGTTTGTGAAGAGCTGAGGGTATCAGGAGGGCCGACGCTGTGTTGGCATGCGCAGTAG
GGGATGAGGGTTAGCCATAGTATTCTTTGCAATGTGAAAGCGAGACATTATATCTTCTCTGCTTGGTGTAACT
AATCACTGTTAATTTTCAGGAAACAGAACTCATTAAATCCTTAGCAAACCAGGTCTACATCCTGTTTGTGTTGC
TGAGTGAGGTTAGTGGGAGTGGTCAAATTTGGTACTCTTGAGGAAGAAAACCTGTCCTTCCTTCTCAAAAAAGG
AAAAATTATAATAATATAAATGACAAAAATAAAGAATTCTGTTTCTGGAATAAGCATTCTTATTCTAGTTG
TAGGGACTCCTATTTTTACCTTCCGTTACAGTGTGATTTCATAAGAAATATTGTTACATTGAGATAACTTCATC
TGTATGGGGTATTTATTTGCAATGATGTCTGAGTACTGTATTTTTCTGTGCATTACCTTAGTGTGAGAAATGTTG
GTCTTTATTTTTAAAGTCATATGCATGTTCTCCTGCCAAGGAACCTTTACACAGACCCAAACAAAAAATAATAAT
CAAATGCCTTCAATTTCTGAGAAAAAGAGGCAGAGCATGGAAAAGGAATAGGAAGGAGAAATTAATTGAGATTTT
CAGGACACAGACATATGATGTGAATGCCTACAAAGCCAGTGCGCATAGGAACAGTGGGCTGGGTAAAGAGTCAC
ATTGGTAGGACCAATAAAGAATAATAAAAAAGAC

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FIGURE 2721

MSAPSEEEYARLVMEAQPEWLRRAEVKRLSHELAETTREKIQA AEYGLAVLEEKHQLKLQFEELEVDYEAIRSEM
EQLKEAFGQAHTNHKKVAADGESREESLIQESASKEQYYVRKVLELQTELKQLRNVLTINTQSENERLASVAQELK
EINQNVEIQRGRLRDDIKEYKFREARLLQDYSELEENISLQKQVSVLRQNQVEFEGLKHEIKRLEETEYLN SQ
LEDAILRLKEISERQLEEALET LKTEREQKNSLRKELSHYMSINDSFYTSHLHVSLDGLKFSDDAEPNND AEALV
NGFEHGGGLAKLPLDNKTSTPKKEGLAPPSPSLVSDLLSELNISEIQKLKQQLMQMEREKAGLLATLQDTQKQLEH
TRGSLSEQQEKVTRLTENLSALRRLQASKERQTALDNEKDRD SHEDGDYVEVDINGPEILACKYHVAVAEAGELR
EQLKALRSTHEAREAQAEEKG RYEAEGQALTEKVSLL EKASRQDRELLARLEKELKKVSDVAGETQGSLSVAQD
ELVTFSEELANLYHHVCMCNETPNRVMLDYYREGQGGAGRTSPGGRTSPEARGRRSPILLPKGLLAPEAGRADG
GTGDSSPSPGSSLPSP LSPDRREP MNIYNLIAIIRDQIKHLQA AVDRTELSRQRIASQELGPAVDKDKEALMEE
ILKLKSLSTKREQITT LR TVLKANKQTAEVALANLKS KYEN EKAMVTETMMKL RNELKALKEDAATFSSIRAMF
ATRCDEYITQLDEMQRQLAAAEDEKKTLSLLRMAIQQKLALTQRLELLELDHEQTRRGRAKAAPKTKPATPSVS
HTCACASDRAEGTGLANQVFCSEKHSIYCD

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FIGURE 2722

GCGGCCTGGGCGGCCGACCATGGACTCGGGAACCGAGGAGTACGAGCTCAACGGCGGCCTGCCTCCGGGCACAC
CCGGCTCCCCGGACGCCTCGCCGGCCCGCTGGGGCTGGAGGCACGGGCCCATCAACGTGAACCATTACGCCAGCA
AGAAGAGCGCAGCCGAGAGCATGCTGGACATCGCGCTGCTGATGGCCAACGCGTCCCAGCTGAAGGCCGTCTGG
AACAGGGCCCCAGCTTCGCCTTCTATGTGCCCCCTGGTGGTCCCTCATCTCCATCTCCCTTGTGCTGCAGATCGGCG
TGGGGGTGCTGCTCATCTTCCTTGTCAAGTACGACCTTAACAACCCGGCCAAGCACGCCAAGCTGGACTTCCTCA
ACAACCTGGCCACGGGCCTGGTGTTCATCATCGTGGTAGTCAACATCTTCATCACGGCCTTCGGGGTCCAGAAGC
CCTTGATGGACATGGCACCCAGCAGTAGGACACCCAGGACCCTGGATGTTGCCTGCCCTGCAACTCAGCTGCCC
GACCCAGGAGTCGCCATACCTGTGAGGTGTCCACCTCCCTGCACATGGCACTACCCAGACTGCCAGAGCCCAGG
CTGGCCTCATCTGCACCATGTCCCCGGACCAGCCCTTGCTCTGACTGCGGCCAAGCACACGCAGGAGGCCACTC
TTGTCTCTCAGCAGCTGTTCCCAGGAGGCAGCTCCCTCCTGGCACATGGGGCTGGCCACAATAGCCCAGAGGGT
CAGAACTGGACAGCTGCAGAGACCTGTGCCAGAGAAGGGTCTCGACCCACTCAAGGACACACAGCAGGTCCGTG
GATGGGCTGGATGAGTGACCAGGGCCAGCCTCTGTCTCAGGACATTCCAGAAGGACAAGGAGATGTCTCTCCCTC
TCCCAAAGCACACGCGTCCCTGCCTCCCGTGGGGCCCTGTCCGGGTTGCCCTGGTGACCCAGCCTCTGTCCACTT
CCTAACCCAGGGACCCCTGCACAGCCAGAACTGCCTTTGGCCCTACGGATGGCCACTGGCTCTGGTCTTAAGTGCC
TGGGCTTGTTGGCCATCAAGAGGGAGCCAGTCAGGCCTGTGAGGGCCGTAGACCTTGTATATACCCTGCAACCAGC
AGTGACCGGGCAGAGCCCAACCCCTCCACGGGGGTCCCAGCACCCACTTTTCTAATCATGAATGAACAATAAAG
CCCACGCTCTTTGTGAGGC

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FIGURE 2723

GCTGCAGCCCTCAGAAGTAAGCAAGGTTTCCTGCCGGGAGAAAAGGATTGAAGCATTCCAGCCAAAATGACGGA
CAGAAGCCCCCTTCGAAACCGACATGCTCACCCTGACCCGCTACGTTATGGAAAAGGGGCGTCAGGCCAAAGGGAC
TGGGGAGCTCACCAGCTGCTGAACTCAATGCTGACGGCCATCAAAGCCATCTCCTCGGCTGTGCGCAAGGCCGG
TCTGGCCACCTGTATGGAATCGCAGGAAGCGTTAACGTGACGGGAGATGAGGTGAAGAACTGGATGTGCTATC
CAATTCCTGGTGATCAACATGCTCCAATCCTCCTATAGTACCTGCGTCTGCTCTCAGAAGAGAATAAGGACGC
CATCATCACCGCCAAGGAGAAGCGGGGGAAATACGTGGTCTGCTTTGACCCACTGGATGGATCTTCCAATATTGA
CTGCCTGGCCTCCATCGGAACCATCTTTGCCATCTATAGAAAAGACCTCAGAGGATGAGCCTTCTGAAAAGGATGC
CCTGCAGTGTGGCCGCAATATTGTGGCCGAGGTTATGCGCTGTACGGTAGTGCAACCCCTGGTGGCTCTCTCCAC
AGGGCAAGGCGTGGACCTCTTCATGCTTGACCCGGCTCTTGGTGAATTTGTCCTGGTGAAAAAGATGTCAAGAT
TAAGAAGAAAGGAAAGATTTACAGCCTGAATGAGGGCTATGCCAAGTATTTTGATGCGGCCACCACTGAATATGT
GCAGAAAAAGAAATTCCTGAGGATGGCAGTGCTCCCTATGGGGCCAGGTATGTGGGCTCCATGGTGGCTGACGT
GCACCGCACCCCTGGTCTATGGAGGAATCTTCCTGTACCCAGCCAACCAGAAGAGCCCTAAGGGCAAGCTCCGGCT
CCTGTATGAATGCAATCCCGTGGCCTACATCATTGAGCAGGCAGGAGGCTTGGCGACCACGGGGACCCAGCCTGT
ACTGGACGTGAAGCCCGAGGCAATTCACCAGCGAGTCCCCCTCATTCTGGGGTCACCAGAGGATGTGCAGGAATA
TCTCACCTGTGTGCAGAAAAATCAGGCAGGCAGCTAGCGAGTTTGACCCACATGCCCTCTTCTGTTTGTGTTTGC
ACCTTGCTTAAGGACCCTAAATGAACGATAAACAGAGATGGTAGCTATGAGTATGCAAAAGGTAAATCCACTTAA
TCACATACAGAAGAGCAACAACAACTGCTTACGACAGGTTTGGAAGCCACAGGCGATTCTATGGTCAATGTGAA
GGACTAGAAATAAAAACCCACATGTGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2724

MTDRSPFETDMLTLTRYVMEKGRQAKGTGELTQLLNSMLTAIKAISSAVRKAGLAHLYGIAGSVNVTGDEVKKLD
VLSNSLVINMLQSSYSTCVLVSEENKDAIITAKEKRGKYVVCFDPLDGSSNIDCLASIGTIFAIYRKTSEDEPSE
KDALQCGRNIVAAGYALYGSATLVALSTGQGVDLFMLDPALGEFVLVEKDVKIKKKGKIYSLNEGYAKYFDAATT
EYVQKKKFPEDGSAPYGARYVGSMAVHVHRTLVIYGGIFLYPANQKSPKGLRLLYECNPVAYIIEQAGGLATTGT
QPVLDVKPEAIHQRVPLILGSPEDVQEYLTCVQKNQAGS

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FIGURE 2725A

CCGAATAGTTAGCCAAGACTACCCGCAGCATCAATAGTCGGCTCCCTGGCCCAGGGCCTGGAGAGTAAGTGGCCA
AGTGGGTGCTGGGCTGGTATGGGAGCCCCGGGTCCCTGGAGCACCTTGCTGGCTGTGGCAGTCACCGGAAGCA
GAGGCTGTCCACCTGGAGGCACAGCGGCACTCCTTGGCACTATTTTGGCCACTTCAGGTTTTATAATCTGTTGAA
ACAAAAATTGTGGGGGAACATCTTGAGTAGGTTTAGAGATGGAATGGGAAGCCTGGCAGAAGCGCTGGTCCAGTC
TTCAGGGTCACGGCTGATACAGGAGTTTAAGCGGCCGTGTGACTCCAAAGCCTAGCTTCTGCAAGCAGATGTTTT
CTTCTAGCCATGTGTGAATTGGAGGTTCCCTGGGCTGTCCACGCCTGGTCATCGGCTGGCAGGAGGCTCTCCAGG
CACACGCAGCACACACAGCACATGCACCACACGTAGCACACACACTGCATGCAGCACACACACACCAGAGGACGC
ACCACACAGAGCACGCACAGCACACACCACACAGCGCACGCACCACACAGAGCACACGCGGCACACACAGCACAC
ACAGCGCACGCACCACGCAGAGCACACACGGGCACATGCAGCATAACACCAAACAGCGCACGCACCACACAGAGC
ACACGCGGCACACGCAGCACACACACCACACAGAGCACCTGGAGCACCACAGCACACACACCACGCAGAGTACA
CGCGGCACACACACCACACACAGCGCATGCACAACACAGAGCACACACAGCACATGCACCACACGTAGCGCGCAC
ACTGCATGCAGCACACACACCACACACAGCGCGTGCACCACACAGAGCACCTGCGGCACACACAGCACACACCGC
ACGCACCACACAGAGCACATGTGGCACACACAGTGCACGCACCACACAGCACCCGCGCGGCACACAGCACACGCTG
GCATATGGCCTCCATGACCCTGTGTCTTGAGGGCAGGTCCTACTTTTGCTTTGTTGTGTTGGAGCGGAATTTCT
CCCCTGGCTTCTATTGGAGTCTTAGATTATTTAAATCACTTCCTCTGTTAATTGTGCTTGAATTAACCTGTTAG
ATTTACTTCTTAGCAGTTAGTTGCTCAGTATGGGTTTCTACACTATTAAGCAACCTAGCGGTAGTACACAAGGT
TTTGTTAGGATAGCTGTGAGATTTTTTTCTCTAACAATCATCATIATTTCTGTGCTGCTCCGTTTTTCTTCAG
TGTTTTATATGATATTAATAGGGGATGTCTAATTTTGTATCTTTAAAAAACTTTATCAAATCTGAAGCATTTTT
CGTGTTATAGCTTCTCTATAATTTTTCATGGATATTGAATATTTGGTGTGATATTCTTCACTCAGTTTTGAACA
TTGAGTTTTCTTCTAATGTTTTGTGCTTATGAAAACCATTTCTGTGTAACGTGTTTAAGTAGCTTATTTATCTGA
AAGAATCTAATAATGAAAAGAAATAAAAAGTTTTTTCAGAAGCATGATCATATTCTTCCAGAAGAGTCAGGAACC
ATGTGTGCCAGGAAGGGAAACGGGACTGAGCGTCTCGTAGCGAAACGCCGTGCTGCAGACTTGACGCGGCTCCCC
TCCAGGACGGGCTGGCGGCACACAGACTGTGCACCTTACCTCACTGCCGGCCTCATAATAGTAATCAGTGTAATG
GTGTTTTCTCTTTCTGTTTTGTTATTTCTGTGGCGTACGTGTTAAAGTGTGTGAAACTACAAGGCCAGCTAGTCCTTT
CATCATTCCCTTTGGTGCAGGTTTTGGAGCAGCACCACAGGGCACACCCCTCGCCACTCTTTATGGGGAATTTTT
GCCCAGGCAGGCAAAGGAGTCATCTTGGTCACAAGTCTCCCTTTTCCCCCTCCCCAGCATCTTCGATCCTGTCCC
CACCCCTCCAGATGCATCCAGGGGTGCAAGCCTGCCCCCAACAGTCCCCGTGAGGAACAGTGCCCGGGATTG
TCCCAGGGCCCCCTTCCAGCAGGGGGACCTCCTGACTTGAGAGTCCCCAAAGCCTTCCCAGGGCAGCTAGAATCTG
CCTGGAGAGAAGGGATCTTGTCCCAAGGGTTAGAGGCAGTAACTAATAGCAAGGACAGCTGCCTTTAGCAATT
GTGTGTGTGCATGGCCGGTCCCTGCATTTTTCTTCAGTTCCAAAGCTGCCTGGCATTTTTATGGTCATCTCTG
GAGTCCCTTTGATTCAAGAAATTATACCTCTAGGATGCCAACTAAACGAACAACAACAGAACTCCACCTGTTT
GCTAGCATAACAGGCGTGAAGGGCGCAGTGTGCGCGGCGTCTTCCGCGGAAGCCAGTGTGTGCAGACAGCAG
GGGTGGCGCTGCTCTCAGGTGCTCTGGCTGCTTGGGTTCCTGGCATGCTGATTGTGACTTAAGATTAAATACAC
ATTGCCAGGGATTACCACGCAACACGACCTTGGCTGCTCCTCCAGAAACCGTGGTTCGCGCTCACTGCAGATTGG
AGAACAGGTGCATCTCGTAGCTCTTCTTTGGAACAAAAGAAGCCACCAGCTGAGGAAGATGCTCACCAGTACC
GTCCCTTTATTTATGCCAGCGATGACCTCTCTAACAAGGTGCAGAGCTTAGCTGATTGGTGAACAGTGATTGGT
TTCCGCTTTGTTACAGTGGCTAAGTTCTGCACCTGAAGAGAAGGTGAGATGGGGACAGTTAAGTTGGAGCCGCT
GGGGCAGAGGCCGTTGCTGACGGGCGGCGCTGCTGCACAGTCAGCTTGGGTGCGGAGCGCGATCCTGGAGGAT
GAGAGACCACTTGACCCCAAGGATGCACTGTCTCCTGCTGGGAATGCTAGCCATGTACTGAGTCTTAAAGTCTGT
CCACAGAAACATGCACTAATCGGACATCTGTCTGAAAGGTCAAATGTATTGAAAGTTGCAAAAATTCTTCTTACA
AAAACTAAACCAAATGCATCACCTAAGTCTGTGAAATCATGTGGTAGCTCATGGCTGTGAGCGGGGCGGGGC
GGGGCTTTCGGAGGAGCTCCTGTTGTTCTGGGCGCGGTGAAGTCTCTCTTGTATTGTCAGTCCAGGCCTTCGCGT
CTCCTGCGCCAGCAGACGGTGCCACGGAGCTCCAGCTGAGGCGCTGCTTCTCCGGGCTGTGATTGGACCCGC
CCTCCGGTGCTACTGAGCTGATATCAGTTCTCATTTTACACACTGGCTCAGTTTACGAGGAACAGGAGTGCAGC
CCTTGAGCAAAAAGCCTTCTGTCTGTGTAAGTGCAGAGGCTCAGGAGAGCTGGGGCTCCCACTCGCGGCAGACAG
GCGCGCTCCACCTGCGTCCACCCCGGCGCGGCGGCAGCAGGTCAGTGCATGTGCTCCTGCGGCGT
GGGGGTTGTAGACTTGGAACCCCTGTTGGCAGAAAGTTAAGAGCTCCAGGCCTGAAGGCAGGACACAGTGCC
AGCAGGGGGCGGTTTGCCCCCATGTGTAAGGGAGGCAGGGCCCAGCTCTCCACGCGAGGTGAGCTGAGACTTT

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FIGURE 2725B

CTGAGAACAGTTAGAGTGGGTGCGTGTCTGAAATGGGTACTCCTAGCAGCTATTGTGTACGCAAAGCCTGAGTAC
AGCCTGCTGGTGTGTCATGGCCACGTGTGAGCAGGCCAGCGTCACACGGCTCGCTGTGACCCGTCCCGGAGACTGAA
ATGGGCCTGGGTCTTCTCCTTGTCTGTGATTAAAGTCCTCTCTTGAAAGTGGAGAGCAAAGGCACACAGAGGTG
CGCGCTCACAAGAATTCTCCCGGTGACTGGGTAATCAATGTTACTGCTGTTTCCTTTGCAGGAAAGACCACAGC
AAGATTCTTTCATTTCGTCTCCTCCTAGCCTGGGGGACCAGGCTCGAACTGACCCTGGACATCAAAGGAGGGATTA
TGTGGCTGCTAAAGCCATCGGCCCACAGCCCTGTTACATCTTGGTGCTTCTCTTTCCCAGAGGCTGGTCCCAGC
CAGGCACACACAAAAGGCAGATTCTCGTAAACGCAGCCTCCCTCCCTGGAGGCTGCCTCCTGCCCTGGATCTGGA
GTGGAGCTGCTCTGAGATTTTGAGTTCTTCTGCAGAGATGATTAAATATATCCAAGAGACATTGGAAAACCTGCT
GAACATTTTACATTGGTCTGCTCAGCACATGGCTGGATGCGGATATTTCTATAATTCCAGAAAGTCACACAGCTC
CTCTGTATGAGACCAGTGGGCGCCATTTAAAAGAACAGGATGAGAATCTAAGATATATTATTAATAAATGTAATG
GATTTTTTTTTTGT

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FIGURE 2726

GGCGGCCTCAGCAAAAAAGAAGAAGAAGGGGAAGACTATCTCCCTAACAGACTTTCTGGCTGAGGATGGGGG
TACTGGTGGAGGAAGGACCTATGTTTCCAAACCAGTCAGCTGAGCTGATGAAACGGATGACCTGGAAGGAGATGT
TTCGACAACCTTGGCACAGTAACGATGACGATGTGTATAGGGCGTCTCCAATTGACCGTTCCATCCTTCCCCTGCT
TCCACGGGCTGCTCGGGAACCCAATATCGACCGGAGCCATCTTCCCAATCGCCACCCTACACTGCTTTTCTAGG
AAACCTACCCTATGATGTTACAGAAGAGTCAATTAAGGAATTCTTTCGAGGATTAAATATCAGTGCAGTGCCTTT
ACCATGTGAACCCAGCAATCCAGTGAGGTTGAAAGGTTTTGGTTATGCTGAATTTGAGGACCTGGATTCCCTGCT
TAGTGCCCTGAGTCTCAAGGAAGAGTCTCTAGGTAACAGGAGAATTCGAGTGGACGTTGCTGATCAAGCACAGGA
TAAAGACAGGGATGATTGTTCTTTTGGCCGTGATAGAAATCGGGATTCTGACAAAACAGGTACAGACTGGAGGGC
TCGTCCTGCTACAGACAGCTTTGATGACTACCCACCTAGAAGAGGTGATGATAGCTTTGGAGACAAGTATCGAGA
TCGTTATGATTACAGACCGGTATCGGGATGGGTATCGGGATGGGTATCGGGATGGCCAACGCCGGGATATGGATCC
ATATGGTGGCCGGGATCGCTATGATGACCGAGGCAGCAGAGACTATGATAGAGGCTATGATTCCCGGATAGGCAG
TGGCAGAAGAGCATTGTCAGTGGGTATCGCAGGGATGATGTCTCAGAGGAGGCGGGGACCACTATGAAGACCGA
TATGACAGACGGGATGATCGGTCTTGGAGCTCCAGAGATGATTACTCTCTGGATGATTATAGGCGTGATGGTAGA
GGTCCCCCCCCAAAGACCCAACTGAATCTAAACCCTCGGAGTACTCCTAAGGAAGATGATTCTCTGCTAGTACC
TCCAGTCCACTCGAGCTGCTTCTATCTTTGGAGGGGCAAAGCCCGTTGACACAGCTGCTAGAGAAAGAGAAGTA
GAAGAACGGCTACAGAAGGAACAAGAGAAGTTGCAGCATCAGCTGGATGAGCCAAAAGTAAACGACGGCCTCCG
GAGAGACACCCAAGCTGGCGAAGTGAAGAACTCAGGAACGGGAACGGTCGAGGACAGGAAGTGAGTCATCACAG
ACTGGGACCTCCACCACATCTGGCAGAAGTAAGTCAGCCAGGATGCACGAAGGAGAGAGAATGAGAAGTCTCTA
GAAAATGAAACACTCAATAAGGAGGAAGATTGCCACTCTCCAACCTTCTAAACCTCCCAAACCTGATCAGCCCCTA
AAGGTAATGCCAGCCCCCTCCACCAAAGGAGAATGCTTGGGTGAAGCGAAGTTCTAACCCTCCTGCTCGATCTCAG
AGCTCAGACACAGAGCAGCAATCCCCTACAAGTGGTGAGGGAAAAGTAGCTCCAGCTCAACCATCTGAGGAAGGA
CCAGCAAGGAAAAGATGAAAACAAAGTAGATGGGATGAATGTCCCAAAGGCCAAACTGGGAACCTTAGCCGTGGT
CCAGGAGATGGAGGGAACAAAGACCACTGGAAGGAGTCAGATAGGAAAGATGGCAAAAAGGATCAAGACTCCAGA
TCTGCACCTGAGCCAAAGAAACCTGAGGAAAATCCAGCTTCCAAGTTTCAAGTTCTGCAAGCAAGTATGCTGCTCTC
TCTGTTGATGGTGAAGATGAAAATGAGGGAGAAGATTATGCCGAATAG

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FIGURE 2727

CCTTTGGGAAGCTGCCCCGCGAGTCTCCGAGATTTGTCCCTGGTGGTCCCGCGGACCCCTCGTCCCTCCGCAGTC
TCCGGCTGGCAGCGATGGAGGGCGCTGGGGAGAACGCCCCGGAGTCCAGCTCCTCTGCCCCCTGGGTCCGAAGAGT
CTGCCAGGGATCCACAGGTGCCGCTCCGGAGGAAGAATCGGGGGACTGCGCCCGGTCCCTGGAGGCGGTCCCCA
AGAAACTCTGTGGGTATTTAAGTAAGTTTCGGCGGCAAAGGGCCCATCCGGGGCTGGAAATCCCCTGGTCTCTCT
ACGACGAAAGGAAATGTCAGCTGTATTACTCGCGGACCGCTCAGGATGCCAATCCCTTGGACAGCATCGACCTCT
CCAGTGCAGTGTTTACTGTAAGGCGGACGCTGAGGAGGGGATCTTCGAAATCAAGACTCCCAGCCGGGTATTA
CCCTGAAGGCCGCCACCAAGCAAGCGATGCTGTACTGGCTGCAGCAGCTGCAGATGAAGCGCTGGGAATTCCACA
ACAGCCCCCGGCACCTCCTGCCACCCCTGATGCCGCCCTGGCTGGGAATGGGCCCGTCTGCACCTCGAGCTAG
GGCAAGAAGAGGCAGAGCTGGAGGAGTTCTGTGCCCTGTGAAAACACCCCTGGGCTAGTGGGCGTGGCAGCTG
CCTTGACGCCCTTCCCTGCCCTTCAGAATATTTCCCTCAAGCACCTGGGGACTGAAATACAGAACACAATGCACA
ACATCCGTGGCAACAAGCAGGCCCCAGGGAACAGGCCATGAACCTCCAGGGGAAGATTCTCCACAGAGTGGGGAGC
CTCAGAGGGAGGAGCAGCCCTTGGCCTCTGACGCCAGCACCCAGGGAGAGAGCCAGAGGATTCTCCAAAGCCTG
CACCCAAGCCTTCTCTGACCATCAGTTTCGCTCAGAAAGCCAAGCGCCAGAACAACACCTTCCCATTTCTTTCTG
AAGGAATCACACGGAACCGAACTGCCAGGAGAAAGTGGCAGCCTTGGAGCAACAGGTTCTGATGCTCACCAAGG
AGTTAAAGTCTCAGAAGGAGCTAGTGAAGATCCTGCACAAGGCACCTGGAGGCCGCCAGCAGGAGAAGCGGGCGT
CCAGCGCATACCTGGCGGCGGCTGAGGACAAGGACCGGCTGGAGCTGGTGCGGCACAAAGTGCGGCAGATCGCGG
AGCTGGGCGGCGGGTGGAGGCCCTGGAGCAGGAGCGGGAGAGCCTGGCGCACACAGCGAGCCTGCGGGAGCAGC
AGGTGCAGGAGCTACAGCAGCACGTGCAGCTGCTTATGGACAAGAACCACGCCAAGCAGCAGGTATCTGCAAGC
TCTCTGAGAAGGTACCCAGGACTTCACGCACCCCCCTGACCAGTCTCCTTTGCGCCCCGACGCTGCCAACAGGG
ACTTCTGAGCCAGCAGGGGAAGATAGAGCACCTGAAGGATGACATGGAAGCTTACCGGACCCAGAAGTCTTCC
TCAACTCCGAGATCCACCAGGTACAAAGATCTGGAGAAAGGTGGCTGAGAAGGAGAAGGCCCTTCTGACGAAGG
TGCGCTTACCTCCAAGCCAGAACTGCCAGGTGGAAAGCAAGTACCTGGCCGGTCTGAGAAGGCTGCAGGAGGCC
CTGGGGGACGAAGCCAGCGAGTGCTCAGAGCTGCTGAGGCAGCTTGTCCAGGAGGCACTGCAGTGGGAAGCTGGG
GAGGCCTCATCTGACAGCATCGAGCTGAGCCCCATCAGTAAGTATGATGAGTACGGCTTCTGACGGTGCCCGAC
TATGAGGTGGAAGACCTGAAGCTGCTGGCCAAGATCCAGGCATTGGAGTCACGATCCCACCACCTGCTGGGCCTC
GAGGCTGTGGATCGGCCGCTGAGGGAGCGCTGGGCTGCCCTGGGCGATCTTGTGCCCTCAGCCGAGCTCAAGCAG
CTACTGCGGGCAGGAGTACCCCGTGAACACCGGCCTCGTGTCTGGAGGTGGCTGGTCCACCTCCGTGTCCAGCAC
CTGCACACTCCAGGCTGCTACCAGGAAGTGTGAGCCGGGGCCAGGCCCGCGAGCACCTGCTGCCCGCCAGATT
GAGCTGGACCTGAACCGGACCTTCCCCAACAAACAACTTCACCTGCCCCACCTCCAGCTTCCCCGACAAGCTC
CGCCGGGTGCTGCTGGCCTTCTCCTGGCAGAACCCACCATCGGCTACTGCCAGGGCCTGAACAGGCTGGCGGCC
ATTGCCCTGCTGGTCTTAGAGGAGGAGGAGAGCGCCTTCTGGTGCCTGGTGGCCATTGTGGAGACCATCATGCCC
GCTGATTACTACTGCAACACGCTGACGGCATCCAGGTGGACCAGCGGGTGTCCAGGACCTGCTCTCGGAGAAG
CTGCCCAGGCTGATGGCCCATCTGGGGCAGCACCGTGGATCTCTCCCTCGTCACCTTCAACTGGTTCTCTGTG
GTCTTTGCGGACAGTCTCATTAGCAACATCCTCCTTCGGGTCTGGGATGCCTTCTGTACGAGGGGACGAAGTAC
AACGAGAAGGAGATCTTGAGGCTACAGAAATGGCCTGGAATCTACCAAGTACCTGCGCTTCTTACCAAGACCATC
TCCAACAGCCGGAAGCTGATGAACATCGCCTTCAATGACATGAACCCCTTCCGCATGAAACAGCTGCGGCAGCTG
CGCATGGTCCACCGGGAGCGGCTGGAGGCTGAGCTGCGGGAGCTGGAGCAGCTTAAGGCAGAGTACCTGGAGAGG
CGGGCATCCCGGCGCAGAGCTGTGTCCGAGGGCTGTGCCAGCGAGGACGAGGTGGAGGGGGAAGCCTGACTTGGC
CACCTCCCCCTCCCCACAGCCTTCCCTACCCCTTGGCTGGCAGACCCACTGGAGGTGAGGCACGGACCAGTGGCCCA
GCCCTGGGTGTCCCATCACCATGTGACCTTGGACATGTCCCTTCCCCTCTCTGGCCCTCAGTTTCCCCACTGGGA
CATTGTGTGCTGCAAGCCATTGGTTGGGCTACTTCTTCATAGGCACTTACTTACCAGGGATGCCACCCCTTTCG
TCACCTCTTCCACAGAGCACTTTGGCATGTAAACAAGCAAGAGCACTGCCTCTATAGGGTAACCTGGAACATTCT
CTAGGTTATATCAATATAAAACAATGTAATGGTGG

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FIGURE 2728

CACAGGGGCACTGACATCTTTGCTGGACTCTTTTAATCCTCATAAACCCAGGCTGCTGGCACTTGAAATTTGAGA
AGGGCAATCAGTCTGGCCTCCTGCCTTTCTGGCCTGCAGGCCAGCCTGGACAAACAATTTAGGTGGAGCTCCTG
GAGGCTGGAAGCAGAGAGGAGGTACCTCACCATCCTCTCCTGCCAGCTGTTGCAGACTCTGCCTGGGGAAGTAT
TAAGGGTGAGCAGAGGCATTTATCTCCATGTTAACAAGCAGATGTCATGGCACCCCCAGTACCGGAGCTCCAAGT
TCCGTCATGTCTTTGGCAAACCCAGCCAGCAAGGAGAACTGCTACGACTCCGTGCCTATCACCCGCAGCGTTCACG
ACAACCACTTCTGTGCCGTGAACCCCCACTTCATTGCAGTTGTGACTGAGTGTGCTGGTGGAGGGGCTTCCTCG
TCATCCCCCTGCACCAGACAGGGAAGTTGGACCCCCACTACCCAAAAGTCTGCGGGCACAGAGGCAACGTTTGG
ATGTCAAGTGGAACCCCTTTTGATGATTTTGGATCGCCTCCTGTTCTGAAGATGCCACAATTAAGATCTGGAGCA
TCCCCAAGCAGCTGCTGACCAGGAACCTCACGGCCTACAGGAAGGAAGTCTGTTGGGCCACGCGCGCAGAGTAGGCC
TGGTGGAGTGGCACCCCCACGGCCGCCAACATCCTCTTCAGTGTGCTGCTATGACTACAAGGTGATGATCTGGAACC
TGGATACAAAGGAGTCTGTATCACAAGCCCCATGAGTACGATTAGCTGTACCAAGATGTGATCCTCTCCATGT
CCTTCAACACCAACGGCAGCCTGTTGGCCACCACCTGCAAAGACCGCAAGATTGCGGTTATTGACCCCCGAGCAG
GGACCGTCTCTCAGGAGGCCAGCTACAAAGGGCACCGGGCCAGCAAAGTGTGTTTCTGGGGAACTGAAGAAGC
TGATGTCCACAGGCACATCCCGATGGAACAACCGGCAGGTGGCCTTGTGGGACCAGGATAACCTCTCTGTGCCTC
TGATGGAGGAGGACCTGGACGGCTCCTCGGGCGTGCTGTTTCCCTTCTATGACGCGGACACCAGCATGCTCTACG
TGGTGGGGAAGGGAGATGGCAACATCCGCTACTACGAGGTGAGCGCCGACAAGCCTCACCTGAGCTACCTGACTG
AGTACCGCTCCTATAACCCACAGAAGGGGATCGGTGTATGCCAAAGAGAGGACTCGACGTGTCTCTCTGCGAGA
TCTTCCGCTTCTACAAGCTGATCACAACCAAAGCCTCATCGAGCCCATCTCCATGATTGTGCCCCGGCAGTCAG
AATCCTACCAAGAGGACATATACCCTCCAACAGCAGGGGGCCAGCCCTCCCTGACGGGCCAGGAGTGGCTCAGCG
GGATGAATCGAGACCCAATCCTGGTGTCCCTTAGGCCTGGCTCTGAGCTGCTGAGACCCACCCACTGCCTGCAG
AGAGACCTATCTTCAATTCCATGGCCCCAGCCTCACCCCGGCTCTTGAATCAGACAGAAAAGCTGGCTGCAGAAG
ATGGCTGGAGGTCTTCTCTCCTGTTGGAGGAGAAGATGCCAAGGTGGGCAGCAGAACACAGGCTGGAGGAGAAGA
AAACCTGGCTGACAAATGGCCTTTGACGTTTTTCGAATGCCCCCACCAGAGAGATGAGTTGCTGCAGATGT
TCTACCGGCAACAGGAGGAGATCCGAAGGCTCCGGGAGCTGTTGACCCAGCGAGAGGTCCAGGCCAAACAGTTGG
AACTGGAGATCAAAAACCTTGCGGATGGGCTCAGAGCAGCTCTGAGCAGAGACCTCTGCCCTCCTCACCCCTCAGGG
ACACCACTCGGCTCCATGGGGAGGTTTGAACCAAACCACAAGTCCCCTCAAGGACAACCACTATTTCTATATTT
TTTACCAGAAAACAAAACCTCTCCATCGCTGAAAGAGATTCCAGTGGGACATGGTGCCGTTTTTCTGTTTGCCTTC
TTGCAACAACAGTTTCTGAATTGACTTTGTTTTTCAGATGATGCCTTCTGTGAATTCTGTTATTAAGGGCCCATG
ATGAGCTGTAACCTTCTCAAGAGGAAAGAACACAGTAGAAAACCTAGAGCTGGAAGGATCTAGGTTGACCTGTCTGT
GATTTTCAAACCTGTGGTCCAGAGAATAGGGGAAGACTGGGCCAGACGCAGTGGCTCATGCCTGTAATCCCAGCAC
TCTGGGAGGCTGAGGTGGGCGGATTGCTTGAGGTGCGGAGTTTGAACCAAGTCTCACCAGGCGCAGTGGCTCAG
CCTGTAATTCCAGCATGTTGGGAGGCCGAGGCTGGTGGATCACGAGGTCAGCAGTTCGAGACCAGCCTGACCAAC
ATGGTGAAACCCCATCTCTACTAAAAA

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FIGURE 2729

MSWHPQYRSSKFRHVFGKPASKENCYDSVPITRSVHDNHFCAVNPHFIAVVTECAGGGAFLLVIPLHQTKGLDPHY
PKVCGHRGNVLDVKWNPFDDEIASCSEDATIKIWSIPKQLLTRNLTAIRKELVGHARRVGLVEWHPTAANILFS
AGYDYKVMIWNLDTKESVITSPMSTISCHQDVILSMSFNTNGSLLATTCKDRKIRVIDPRAGTVLQEASYKGHRA
SKVLFLGNLKKLMSTGTSRWNNRQVALWDQDNLSVPLMEEDLDGSSGYLFFFYDADTSMLYVVGKGDGNIRYYEV
SADKPHLSYLTEYRSYNPQKGIGVMPKRGLDVSSCEIFRFYKLITTKSLIEPISMIVPRQSESYQEDIYPPTAGA
QPSLTAQEWLSGMNRDPILVSLRPGSELLRPHPLPAERP IFNSMAPASPRLLNQTEKLAEDGWRSSSLLEEKMP
RWAAEHRLEEKKTWLTNGFDVFECPPPKTENELLQMFYRQEEIRRLRELLTQREVQAKQLELEIKNLRMGSEQL

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FIGURE 2730

GTGGAGATGAATGGCGGGCGCGGGCGACCGGGAGCCGGACCCCTGGGAGGTCGGAGCTTGTGAGGGATGCGGCTG
GCGCTGCCCCGAGCATGGCGACC GCGTGGCTGAGCTCTTCTGTGCGCCGCTGCCGCCGCTGCGTGTGCGCGCTTG
CCCGGTGCTGGGCGCGCACCGTGGCCACCCTGTGGGCCTGGCGCTGGAGGCAGCGGTGCACGTGCAGAAACTCAG
CCAAGAATGTTTAAAGCAGCTGGCAATCAAGAAGCAGCAGCACATTGACAACATAACCCAGATAGAAGATGCCAC
CGAGAAGCTCAAGGCTAATGCAGAGTCAAGTAAAACCTGGCTGAAGGGGAAATTCACTGAACTCAGATTACTACT
TGACGAAGAGGAAGCGCTGGCCAAGAAATTCATTGATAAAAACACGCAGCTTACCCTCCAGGTGTACAGGGAACA
AGCTGACTCTTGACAGAGAGCAACTTGACATCATGAATGATCTCTCCAACAGGGTCTGGAGTATCAGCCAGGAGCC
CGATCCTGTCCAGAGGCTTCAGGCATACACGGCCACCAGCAGGAGATGCAGCAGCAGATGAGCCTCGGGGAGCT
GTGCCATCCCGTGCCCTCTCTTTTGAGCCCGTCAAGAGCTTCTTTAAGGGCCTCGTGGAAGCCGTGGAGAGTAC
ATTACAGACGCCATTGGACATTGCCTTAAGGAAAGCATAAACTGCCAGCTCTCAGACCCTTCCAGCACCAAGCC
AGGTACCTTGTTGAAAACAGCCCTCACCAGAGCGATCGCTATTGCTGAAATACGCGCGCACGCCACGCTGGA
TCCTGACACGATGCACGCGCGCTGCGCTGTCCGCCGATCGCCTGACGGTGCCTGCGGCCTGCTGGGCAGCCT
GGGGCCCGTGCCCGTGCTGCGGTTGACGCGCTCTGGCAAGTGCTGGCTCGTGACTGCTTCGCCACCGGCCGCCA
CTACTGGGAGGTTGACGTGCAGGAGGCGGGCGCCGCTGGTGGGTGGGCGCGGCCTACGCCTCCCTTCGGCGCCG
CGGGGCCCTCGGCCGCCGCCCGCTGGGCTGCAACCGCCAGTCCTGGTGCCTCAAGCGCTACGACCTTGAGTACTG
GGCCTTCCACGACGGCCAGCGCAGCCGCTGCGGCCCGCGACGACCTCGACCGGCTCGGCGTCTTCCCTGGACTA
CGAGGCCGGCGTCTCGCCTTCTACGACGTGACGGCGGCATGAGCCACCTGCATACCTTCCGCGCCACGTTCCA
GGAGCCGCTCTACCCGGCCCTGCGGCTCTGGGAGGGGGCCATCAGCATCCCCGGCTGCCCTAGGGGCCAGGACC
GGCGTGACAGCCTCCAGACTTGAATCTGTAGACATTTCTTTATTGATATGGCAAATTGCTTGCAGATATTTTAA
ATGACAGCAATTTTCTAATATTTGGTTTAATAAAATGTGAATAATGTCCTTTT

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FIGURE 2731

MAGAATGSRTTPGRSELVEGCGWRCPEHGDRVAELFCRRRCRCVCALCPVLGAHRGHPVGLALEAAVHVQKLSQEC
LKQLAIKKQQHIDNITQIEDATEKLNANAESSKTWLKGKFTLRLLLDDEEEALAKKFIDKNTQLTLQVYREQADS
CREQLDIMNDLSNRVWSISQEPDPVQRLQAYTATEQEMQQQMSLGELCHPVPLSFEPVKSFFKGLVEAVESTLQT
PLDIRLKESINCQLSDPSSTKPGTLLKTSPSPERSLLLKYARTPTLDPDTMHARLRLSADRITVRCGLLGSLGPV
PVLRFDALWQVLARDCFATGRHYWEVDVQEAGAGWWVGAAYASLRRRGASAAARLGCNRQSWCLKRYDLEYWAFH
DGQRSRLRPRDDLDRDLGVFLDYEAGVLAFYDVTGGMSHLHTFRATFQEPLYPALRLWEGAISIPRLP

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FIGURE 2732

GTCGACGCGGCCGCGCTCCGCTCCCGTGAGTAACTTGGCTCCGGGGGCTCCGCTCGCCTGCCCGCACGCCGCCCG
CCACCCAGGACCGCGCCGCCGGCCTCCGCCGCTAGCAAACCTTCCGACGGCCCTCGCTGCGCAAGCCGGGACGC
CTCTCCCCCTCCGCCCCCGCCGCGGAAAGTTAAGTTTGAAGAGGGGGGAAGAGGGGAACATGACATGAAGAGG
AGGATCCACCTGGAGCTGAGGAACCGGACCCCGGAGCTGTTGAGAACTTGTCTTGGACAATTGCAAATCAAAT
GATGGAAAAATTGAGGGCTTAACAGCTGAATTTGTGAACTTAGAGTTCCTCAGTTTAATAAATGTAGGCTTGATC
TCAGTTTCAAATCTCCCCAAGCTGCCTAAATTGAAAAAGCTTGAACTCAGTGAAAAATAGAATCTTTGGAGGTCTG
GACATGTIAGCTGAAAAACTTCCAAATCTCACACATCTAACTTAAGTGGAATAAACTGAAAGATATCAGCACC
TTGGAACCTTTGAAAAAGTTAGAATGTCTGAAAAAGCCTGGACCTCTTTAACTGTGAGGTTACCAACCTGAATGAC
TACCGAGAGAGTGTCTTCAAGCTCCTGCCCCAGCTTACCTACTTGGATGGCTATGACCGAGAGGACCAGGAAGCA
CCTGACTCAGATGCCGAGGTGGATGGTGTGGATGAAGAGGAGGAGGACGAAGAAGGAGAAGATGAGGAAGACGAG
GACGATGAGGATGGTGAAGAAGAGGAGTTTGATGAAGAAGATGATGAAGATGAAGATGTAGAAGGGGATGAGGAC
GACGATGAAGTCAGTGAGGAGGAAGAAGAATTGGACTTGATGAAGAAGATGAAGATGAGGATGAGGATGAAGAG
GAGGAAGAAGGTGGGAAAGGTGAAAAGAGGAAGAGAGAAACAGATGATGAAGGAGAAGATGATTAAGACCCCGAGA
TGACCTGCAGAAACAGAACTGTTTCAGTATTGGTTGGACTGCTCATGGATTTTGTAGCTGTTTAAAAAAAAAAAAA
AGGTAGCTGTGATACAAACCCAGGACACCCACCCACCCAAAGAGCCAAAGAATAGTTCCTGTGACATTCCGCCT
TCCTTCCATGTAGTCCCTCTTGGTAATCTACCACCAAGCTTGTGGACTTCACCCCAACAAAATTGTAAGCGTTGT
TAGGTTTTTGTGTAAGATTCTTGCTGTAGCGTGGATAGCTGTGATTGGTGAGTCAACCGTCTGTGGCTACCAGTT
ACACTGAGATTGTAACAGCATTTTTACTTTCTGTACAACAAAAAGCTTTGTAAATAAAATCTTAACATTTTGGG
TCTGTTTTTTCATGCTTTGCTTTTTAATTATTATTATTATTTTTTTTACATTAGGACATTTTATGTGACAACTGC
CAAAAAAGTATTTTTAAGAATTTAAGCGAAATAAACAGTTACTCTTTGGC

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FIGURE 2733

MDMKRRIHLELRNRTPAAVRELVLDNCKSNDGKIEGLTAEFVNLEFLSLINVGLISVSNLPKLPKPKKKLELSENR
IFGGLDMLAEKLPNLTHLNLSGNKLKDISTLEPLKKLECLKSLDLFNCEVTNLNDYRESVFKLLPQLTYLDGYDR
EDQEAPDSDAEVDGVDEEEDEEGEDEDEDEDGEDEEEFDEEDDEDEDVEGDEDDDEVSEEEEFGLDEEDEDE
DEDEEEEGGKGEKRKRETDDEGEDD

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FIGURE 2734

CCTCGGTTCCGCGGCGCACCGGAGGGCAGCATGTCGCGGCGGCGGCACAGCGACGAGAACGACGGTGGGCAGCCT
CACAAAAGGAGAAAGACCTCTGATGCAAATGAACTGAAGATCATTGGAATCTTTAATATGTAAAGTAGGAGAA
AAGAGTGCCTGCTCTTTGGAGAGCAACCTAGAAGGCTTGGCTGGTGTGTTTGGAAAGCTGATCTTCCTAACTACAAG
AGCAAGATCTTAAGGCTTCTTTGTACAGTTGCACGCCTATTACCTGAGAAGCTGACAATTTATACAACATTAGTT
GGACTACTGAATGCCAGGAATTACAATTTTGGTGGAGAATTTGTAGAAGCCATGATTTCGTCAACTTAAAGAATCA
TTGAAAGCAAACAATTATAATGAAGCCGTGTATTTGGTCCGTTTTTTATCTGATCTTGTGAATTGTCATGTGATT
GCCGCCCCATCAATGGTTGCTATGTTTGAAAATTTTGTAAAGCGTAACCTCAGGAAGAAGATGTACCTCAGGTGCGA
CGAGATTGGTATGTGTATGCATTTCTGTCTATCTTTGCCCTGGGTGGAAAGGAGTTGTACGAAAAGAAAGATGCA
GAGATGGACCGCATCTTTGCCAACACTGAAAGCTATCTTAAAGACGCCAAAAGACTCATGTACCCATGTTACAG
GTATGGACTGCTGATAAAACCACATCCACAAGAAGAGTATTTAGATTGCCTGTGGGCCAGATTGAGAAATTGAAA
AAGGATCGCTGGCAGGAACGGCACATCCTAAGACCTTATCTTGCCTTTGACAGCATCCTGTGTGAAGCACTGCAG
CACAATCTGCCTCCTTTTACACCACCTCCTCACACTGAAGATTCAGTGTACCCAATGCCAAGGGTCATCTTCAGA
ATGTTTGATTACACAGATGATCCCGAGGGTCTGTCTATGCCAGGGAGTCATTGAGTGGAAAGATTTGTAATAGAA
GAGAATCTTCACTGCATCATTAAAGTCCCACTGGAAGGAAAGGAAGACTTGTGCTGCACAGTTAGTGAGCTATCCA
GGGAAGAACAAGATCCCCCTGAACTACCACATAGTTGAGGTGATCTTTGCAGAGCTGTTTCAACTTCCAGCACCC
CCTCACATTGATGTGATGTACACAACACTCCTCATTGAACTGTGCAAACCTTCAACCTGGCTCTCTACCCCAAGTT
CTTGACAGGCAACTGAAATGCTATACATGCGTTTGGACACAATGAACACTACCTGTGTAGACAGGTTTATTAAT
TGGTTTTCTCATCATCTAAGTAACCTCCAGTTCCGTTGGAGCTGGGAAGATTGGTCAGATTGTCTTAGTCAAGAT
CCTGAAAGTCCCAAACCGAAGTTTGTAAAGAGAAGTTCTAGAAAATGTATGAGGTTGTCTTACCATCAGCGTATA
TTAGATATTGTTTCCTCCTACCTTCTCAGCTCTGTGTCTGCAAACCCAACCTGCATTTACAAGTATGGAGATGAA
AGTAGCAATTCTCTTCCTGGACATTCTGTTGCCCTCTGTTTAGCTGTTGCCTTTAAAAGTAAGGCAACCAATGAT
GAAATCTTCAGCATTCTGAAAGATGTACCAAATCCTAACCAGGATGATGACGACGATGAAGGATTCAGTTTAAAC
CCATTGAAAATAGAAGTCTTTGTACAGACTCTGCTACACTTGGCAGCCAAATCATTGAGCCACTCCTTCAGTGCT
CTTGCAAAGTTTCATGAAGTCTTCAAAACCTAGCTGAAAGTGATGAAGGAAAGTTACATGTGCTAAGAGTTATG
TTTGAGGTCTGGAGGAACCATCCACAGATGATTGCTGTACTAGTGGATAAGATGATTTCGTACACAAATAGTTGAT
TGTGCTGCCGTAGCAAATTGGATCTTCTCTTCAGAACTATCTCGTGACTTTACCAGATTGTTTGTGTTGGGAAATT
TTGCACCTCTACAATTTCGTAAGATGAACAAACATGTCTCTGAAGATCCAGAAAGAGCTGGAAGAAGCTAAAGAGAAA
CTTGCTAGGCAACACAAACGGCGAAGTGATGATGACGACAGAAGCAGTGACAGGAAAGACGGGGTTCTTGAGGAA
CAAATAGAACGACTTCAGGAAAAAGTGGAATCTGCTCAGAGTGAACAAAAGAATCTTTTCCTCGTTATATTTTCAG
CGGTTTATCATGATCTTGACCGAGCACCTAGTACGATGCGAAACTGATGGGACCAGTGTATTAACACCATGGTAT
AAGAACTGTATAGAGAGGCTGCAGCAGATCTTCCTACAGCATCACCAATAATCCAGCAGTACATGGTGACCCCTG
GAGAACCTTCTCTTCACTGCTGAATTAGACCCTCATATCTTGCCCGTGTTCAGCAGTTCTGTGCCCTGCAGGCC
TAAGGGTCAATTTTTCTCATGTCAAGTTTTTTTTTGATACTTAAATAATTTGTCTTATTTTTTGATGGTTTG
AATGCTTGCTTTCTTGTAGTATCCTTTCACTTCTTAAAGGAAACAAAGGGGAAGAGGACAGTGAATGAACATGGC
ATTACTTTTAAATTGCCCTGAAAAGCAAATACTTCTAACGGCAGTAATGTGACTATGACCATGATATATTATATA
TGTGACAGATACAAATTCTCTGTGATCAGTTTGTATTTTTTTCTCCTTAAGGCAACAAAATAATTGGTTTGAG
GTATGTGAAACACTAGAGGTCAACCTTACATAGTATATAGAAGTGTGGGTTTACCCAGCTACCCAGTAGCATAA
CTTTTCACAGCTCGGGGATGAATTAACATGGCTGAAATAAACTAAAAGTATG

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FIGURE 2735

MSRRRHSDENDGGQPHKRRKTSANETEDHLES LICKVGEKSACSLESNLEGLAGVLEADLPNYKSKILRLLCTV
ARLLPEKLTIIYTTLVGLLNARNYNFGGEFVEAMIRQLKESLKANNYNEAVYLVRFLSDLVNCHVIAAPSMVAMFE
NFVSVTQEEDVPQVRDWDYVYAFLSSLPWVGKELYEKKDAEMDRIFANTESYLRKQKTHVPMLQVWTADKPHPO
EEYLDCLWAQIQKLKKDRWQERHILRPYLAFDSILCEALQHNLPPTPPPHTEDSVYPMPRVIFRMFDYTDDPEG
PVMPGSHSVERFVIEENLHCIIKSHWKERKTCAAQLVSYPGKNKIPLNYHIVEVIFAE L FQLPAPPHIDVMYTTL
LIELCKLQPGSLPQVLAQATEMLYMRD TMNTTCVDRFINWFSHHL SNFQFRWSWEDWSDCLSQDPESPKPKFVR
EVLEKCMRLSYHQRI LDIVPPTFSALCPANPTCIYKYGDESSNSLPGHSVALCLAVAFKSKATNDEIFSILKDVP
NPNQDDDDDEGFSFNPLKIEVFVQTLHLAAKSF SHSFSALAKFHEVFKTLAESDEGKLHVL RVMFEVWRNHPQM
IAVLVDKMIRTQIVDCAAVANWIFSS ELSRDFTRLFVWEILHSTIRKM NKHVLKIQKELEEAAKEKLARQHKRRSD
DDDRSSDRKDGVL EEQIERLQEKVES AQSEQKNLFLVIFQRFIMILTEHLVRCETDGT SVLTPWYKNCIERLQQI
FLQHHQIIQQYMTLENLLFTAELDPHILAVFQQFCALQA

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FIGURE 2736

CGGCTGTAATCTCAGAGGCTTGTTTGCTGAGGGTGCCTGCGCACGTGCGACGGCTGCTGGTTTTGAAACATGAAT
CTTTCGCTCGTCTGGCTGCCCTTTTGCTTGGGAATAGCCTCCGCTGTTCCAAAATTTGACCAAAATTTGGATACA
AAGTGGTACCAGTGGAAGGCAACACACAGAAGATTATATGGCGCGAATGAAGAAGGATGGAGGAGAGCAGTGTGG
GAAAAGAATATGAAAATGATTGAACTGCACAATGGGGAATACAGCCAAGGGAAACATGGCTTCACAATGGCCATG
AATGCTTTTCTGACATGACCAATGAAGAATTCAGGCAGATGATGGGTTGCTTTCGAAACCAGAAATTCAGGAAG
GGGAAAGTGTTCGCTGAGCCTCTGTTTCTTGATCTTCCCAAATCTGTGGATTGGAGAAAGAAAGGCTACGTGACG
CCAGTGAAGAATCAGAAACAGTGTGGTTCTTGTTGGGCTTTTAGTGCGACTGGTGCTCTTGAAGGACAGATGTTT
CGGAAACTGGGAAACTTGTCTCACTGAGCGAGCAGAATCTGGTGGACTGTTGCGCTCCTCAAGGCAATCAGGGC
TGCAATGGTGGCTTCATGGCTAGGGCCTTCCAGTATGTCAAGGAGAACGGAGGCCTGGACTCTGAGGAATCCTAT
CCATATGTAGCAGTGGATGAAATCTGTAAGTACAGACCTGAGAAATCTGTTGCTAATGACACTGGCTTCACAGTG
GTCGCACCTGGAAGGAGAAGGCCCTGATGAAAGCAGTCGCAACTGTGGGGCCCATCTCCGTTGCTATGGATGCA
GGCCATTTCGTCCTTCCAGTTCTACAAATCAGGCATTTATTTTGAACCAGACTGCAGCAGCAAAAACCTGGATCAT
GGTGTCTGGTGGTTGGCTACGGCTTTGAAGGAGCAAATTCGAATAACAGCAAGTATTGGCTCGTCAAAAACAGC
TGGGGTCCAGAATGGGGCTCGAATGGCTATGTAAAAATAGCCAAAGACAAGAACAACCACTGTGGAATCGCCACA
GCAGCCAGCTACCCCAATGTGTGAGCTGATGGATGGTGAGGAGGAAGGACTTAAGGACAGCATGTCTGGGGAAAT
TTTATCTTGAACTGACCAACGCTTATTGTGTAAGATAAACAGTTGAATCATTGAGGATCCAAGTTGAGATTT
TAATTCTGTGACATTTTTACAAGGGTAAAATGTTACCACTACTTTAATTATTGTTATACACAGCTTTATGATATC
AAAGACTCATTGCTTAATTCTAAGACTTTTGAATTTTCATTTTTTAAAAAGATGTACAAAACAGTTT

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FIGURE 2737

MNLSLVLAAFCLGIASAVPKFDQNLDTKWYQWKATHRRRLYGANEEGWRRRAVWEKNMKMIELHNGEYSQGKHGFTM
AMNAFPDMTNEEFQMMGCFRNQKFRKGKVFREPLFLDLPKSVDWRKKGYVTPVKNQKQCGSCWAFSATGALEGQ
MFRKTGKLVSLSEQNLVDCSRPQGNQGCNGGFMARAFQYVKENGGLDSEESYPYVAVDEICKYRPENSVANDTGF
TVVAPGKEKALMKAVATVGPISVAMDAGHSSFQFYKSGIYFEPDCSSKNLDHGVLVVGYGFEGANSNNSKYWLVK
NSWGPEWGSNGYVKIAKDKNNHCGIATAASYPNV

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FIGURE 2738

ATGAAGATCAAGATCGTGACAGGCAGTGGCGCGAGGCTTGAGTTGGGAAACCAGTTCTCCCACTTCATTAATAAT
GATGTCGATGTTTCCTGGCAGTGTATATACCAAATGCTACTTTGACCTTTGCGCCTTGGCACACGACAGTAGCCTA
TATTTGCCATTTTGTCTTCTTGACATAGAAAGAGCATGGGAACTGAAGGTAATAAAAGCTGGAATTTATGCAGCTC
TTTCGGTCTCCACAGCTCGGGGTCTTGCCACAGACACAGCGCCACGAGTTCTGGCACTTTGGTCAACGTTTATA
AACGGGCTCTCCTCTGCCGCCGCGGGCATGCGCTTTCCCAAGACTCTGAGGCCACTTTTGCTCTCAGAGGCACA
CAGAAGAGACATCGGGCGCATGGCAAGCGGGCAGCTGAAGATGATGAGGATGATGATGTCGATACCAAGAAGCAG
AAGACCGACAAGGATGACTTAG

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FIGURE 2739

MKIKIVTGS GARLELGNQFSHF INNDVDVPGSVYTKCYFDLCALAH DSSLYLPFCLLDIERAWELKVIKLEFMQL
FRSPQLGVLPQTQRPRVLALWSTFINGLSSAAAGMRFPQDSEATFALRG TQKRHRAHGKRAAEDDEDDVDTKKQ
KTDKDD

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FIGURE 2740

GCCAGCTGCCGGTCTTTTCGGGGGCTCCGTAACTTTCTATCCGTCCGCGTCAGCGCCTTGCCACCCTCATCTCCAA
TATGCCTGGTCCGACCCCCAGTGGCACTAACGTGGGATCCTCAGGGCGCTCTCCAGCAAAGCAGTGGCCGCCCG
GGCGGCGGGATCCACTGTCCGGCAGAGGAAAAATGCCAGCTGTGGGACAAGGAGTGCAGGCCGCACAACCTCGGC
AGGCACCGGGGGGATGTGGCGATTCTACACAGAAGATTCACCTGGGCTCAAAGTTGGCCCTGTTCCAGTATTGGT
TATGAGTCTTCTGTTTCATCGCTTCTGTATTTATGTTGCACATTGGGGCAAGTACACTCGTTCTAGATTTCAGTT
ACATCCATCTGTCATCTGAAGAAGGAGGAAAAAACCAACATTTCTTGACCAAAGTATAGTGACTATCTGTTT
ATGAGAGAAATTTTCTGTAAGCTTGCTGTTTTACAGGGGATTTATCAATAATTGATTTTGAGGAATCAGTTTTT
TCTATGGCTAATAAACTTTTTAATTCATTATACTGAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2741

MPGPTPSGTVNGSSGRSPSKAVAARAAGSTVRQRKNASCGTRSAGRTTSAGTGGMWRFYTEDSPGLKVGPVPVLV
MSLLFIASVFMLHIWGKYTRS

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FIGURE 2742

ATGTCTACTCCTTCTGGAATATCCACCTGGCTCAGCCTGCCTGTTTCGACTCCTGCCTCCATCACATCCATCAGA
GTGACCCAGAAGTCCTCTGGCCCTGGGCCTTCAGCAGCTGCACCTACGTGAGTGGGCCTGGCGTCTGCATCAGC
TCCTTGAGCTGCTCCCGAGTGGGGAGCAGCAGCTTTGGGGTGGCCTGGGTGGAGGCTATGGTGGGGCCAGTGGC
ATGGGAGGCATCATCGCCATCATGGTCAACCAGAGCCTGTTGAGCCCCCTTAACCTGGAGGTGGACCCCAACATC
CAGGCCGTGTGTACCCAGGAGAAGGAGCAGATCAAGACCCTCAACAACAAGTTTGCCTCCTTCATCGACAAGGTA
TGGTTCTTGAGCAGCAGAACAAGGTGCTGGAGACCAAGTGGAGCCTCCTGCAGCAGCAGAAGATGGCTCGGAGT
AACATGGACAACATGTTGGAGAGCTACATCAACAACCTTAGGCGGCAGCTGGAGACTCTGGGCCAGGAGAAGCTG
AAGCTGGAAGCAGAGCTTGGCAACATGCAGGGGCTGGGGGAGGACTTCAAGAACAAGTATGAGGATGAGATCAAT
AAGCATACGGAGGTGGAGAATGAATTTGTCCTCATCAAGAAGGATGTTGATGAAGCTTACATGAACAAGGCAGAA
CTGGAGTCCCTCCTGGAAGGGCTGACTGACGAGATCAACTTCCTCAGGCAGCTGTATGAAGAGGAGATCCGGGAG
CTGCAGTCCCAGATCTCCGACATGTCTATGGTGCTGTCCATGGACTACAGCTGCTCTCGGGACATGGACAGCATC
ATCCCTGAGGTCAAGGTGCAGTATGAGGAGATTGCCAACTGCAGCCGGGCTGAGGCTGAGAGCATGTACCAGATC
AAGTATGAGGAGCTGCAGACGCTGGCTGGGAAGTACGGGGATGACCTAAGCCGCACAAAGACTGAGATCTCCGAG
ATGAACCGGAACATCAGCTGGCTCCAGGCTGAGACCGAGGGCCTCAAAGGCCAGAGGGCTTCCCTGGAGGCCGCC
ATCACAGATGCCGAGCAGCGTGGGGAGCTGGCTGTTAAGGATGCCAACGCCAAGCTGTCCGAGCTGGAGGCCGCC
CTGCAGCGGGCCAAGCAGGACATGATGGGGCAGCTGCGTGAGTACCAGGAGCTGATGAACGTCGGGCTTACCCTG
GACATCGAGATTGCCACCTACAGGAAGCTGCTGGAGGGCGAGGAGAGCCGGCTGGAATCTGGGATGCAGAACGTG
AGTATCCATACGAAGACCACCAGCAGCTATGCAGGTGGGCTGAGCTCGGCCTATGGGGGCCTACAAGCCCCGGC
ATCATCTACCGCTGGGCTCCAGCTTTGGCTCTGCCCGGGCTCCAGCTCCTTCAGCCGCACCAGCTCCACCAGG
GCCGTGGTTGTGAGGAAGATCGAGACCCATGATGGCAAGCTGGAGTCCGAGTCCTCTGACGTCCTGTCCAAGTGA

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FIGURE 2743

MSTPSGISTWLSLPVSTPASITSIRVTQKSSGPWAFSSCTYVSGPGVCISSLSCSRVGSSSFRGGLGGGYGGASG
MGGIIAIMVNQSLLSPLNLEVPNIQAVCTQEKEQIKTLNNKFASFIDKVVWFLEQQNKVLETKWSLLQQQKMARS
NMDNMLESYINNLRRLQLETLGQEKLEAELGNMQGLGEDFKNKYEDEINKHTEVENEFVLIKKDVDEAYMNKAE
LESLLLEGLTDEINFLRQLYEEEIRELQSQISDMSMVLSDYSCSRDMSIPEVKVQYEEIANCSRAEAEESMYQI
KYEELQTLAGKYGDDLSRTKTEISEMNRNISWLQAETGLKGQRASLEAAITDAEQRGELAVKDANAKLSELEAA
LQRAKQDMMGQLREYQELMNVGLTLDIEIATYRKLEGEESRLESGMQNVSIHTKTTSSYAGGLSSAYGGLTSPG
IYRLGSSFGSAAGSSSFSRTSSSTRAVVVRKIETHDGKLESESSDVLSK

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FIGURE 2744

AAAAACATGATGAGAAGTCTATAAAAAATTGTGTGCTACCAAAGATCTGTCTTATTTGGCAGCTGCTGCCTCACCC
ACAGCTTTTGATATCTAGGAGGACTCTTCTCTCCCAAACCTACCTGTCACCATGCCCCACCGATTTCAGCCCTCA
CCCAGGAGCAGAAGAAGGAGCTCTCAGAAATTGCCCAGAGCATTGTTGCCAATGGAAAGGGGATCCTGGCTGCAG
ATGAATCTGTAGGTACCATGGGGAACCGCCTGCAGAGGATCAAGGTGGAAAACACTGAAGAGAACC GCCGGCAGT
TCCGAGAAATCCTCTTCTCTGTGGACAGTTCCATCAACCAGAGCATCGGGGGTGTGATCCTTTTCCACGAGACCC
TCTACCAGAAGGACAGCCAGGGAAAGCTGTTCAAGAAACATCCTCAAGGAAAAGGGGATCGTGGTGGGAATCAAGT
TAGACCAAGGAGGTGCTCCTCTTGCAGGAACAAACAAAGAAACCACCATTCAAGGGCTTGATGGCCTCTCAGAGC
GCTGTGCTCAGTACAAGAAAGATGGTGTGACTTTGGGAAGTGGCGTGCTGTGCTGAGGATTGCCGACCAGTGTCTC
CATCCAGCCTCGCTATCCAGGAAAACGCCAACGCCCTGGCTCGCTACGCCAGCATCTGTCAGCAGAATGGACTGG
TACCTATTGTTGAACCAGAGGTAATTCTGATGGAGACCATGACCTGGAACACTGCCAGTATGTTACTGAGAAGG
TCCTGGCTGCTGTCTACAAGGCCCTGAATGACCATCATGTTTACCTGGAGGGCACCCCTGCTAAAGCCCCAACATGG
TGACTGCTGGACATGCCTGCACCAAGAAGTATACTCCAGAACAAGTAGCTATGGCCACCGTAACAGCTCTCCACC
GTACTGTTTCTGTCAGCTGTTTCTGGCATCTGCTTTTTGTCTGGTGGCATGAGTGAAGAGGATGCCACTCTCAACC
TCAATGCTATCAACCTTTGCCCTCTACCAAAGCCCTGGAAACTAAGTTTCTCTTATGGACGGGCCCTGCAGGCCA
GTGCACTGGCTGCCTGGGGTGGCAAGGCTGCAAACAAGGAGGCAACCCAGGAGGCTTTTATGAAGCGGGCCATGG
CTAACTGCCAGGCGGCCAAAGGACAGTATGTTACACGGGTTCTTCTGGGGCTGCTTCCACCCAGTCGCTCTTCA
CAGCCTGCTATACCTACTAGGGTCCAATGCCCGCCAGCCTAGCTCCAGTGCTTCTAGTAGGAGGGCTGAAAGGGA
GCAACTTTTCTCCAATCCTGGAAATTCGACACAATTAGATTTGAAGTGTGGAAATACAACACATGTTAAATCT
TAAGTACAAGGGGGAAAAAATAAATCAGTTATTGAAACATAAAAAATGAATACCAAGGACCTGATCAAATTTTACA
CAGCAGTTTCTTGCAACACTTTTCACTCCCCATGCTCCAGAATACCCACCCAGAAAATAATAGGCTTTTAAAC
AATATCGGCTCCTCATCAAAGAACAACCTGCTGATTGAAACACCTCATTAGCTGAGTGTAGAGAAGTGCATCTTA
TGAAACAGTCTTAGCAGTGGTAGGTTGGGAAGGAGATAGCTGCAACCAAAAAAGAAATAAATATTCTATAAACCT
TC

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FIGURE 2745

MAHRFPALTQEQKKESEIAQSIVANGKGILAADESVGTMGNRLQRIKVENTEENRRQFREILFSVDSSINQSIG
GVILFHETLYQKDSQGKLFERNILKEKGIVVGIKLDQGGAPLAGTNKETTIQGLDGLSERCAQYKKDGVDFGKWRA
VLRIADQCPSSLAIQENANALARYASICQQNGLVPIVEPEVIPDGDHDLHCQYVTEKVLAAVYKALNDHHVYLE
GTLKPNMVTAGHACTKKYTPEQVAMATVTALHRTVPAAVPGICFLSGGMSEEDATLNLNAINLCPLPKPWKLSF
SYGRALQASALAAWGGKAANKEATQEAFMKRAMANCQAAKGQYVHTGSSGAASTQSLFTACYTY

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FIGURE 2746

GCCGCTTTGGGGGCCGCGGTCTCTCCGCAGCTCGCGGGTCACATGGCCCGCCTGAGCAAGGGGAGCCCTGCGCCT
GAGCTGCGAGGCGGGAGGAGGTGAGGCTCCGGCGCACACCCAAACCGCGCTGCGCCCGCTCCTTCCGGGCCCCGG
AGATGGCGCCTCCACCGGGATGAGCTAGCCAGCCTGGGCAATACCAGAGGCGGCCCTCGGCGCGCGCAGGGGACC
GAGCTGGTCGCCCCAACCGGGTTTGATTTCTGATGACTCTGGCCTGAGTTCCAGGATGGTTTTTCTTGGGACCA
GACATGAACAAAAGTTGACCTCATGAGCACTTCAACCTCTCCAGCTGCCATGCTCCTCCGGAGGCTGCGGCGACT
GTCTGGGGCAGCACTGCTGTCCAGCTCTTCATCCTAACAGTGGTGACGTTTGGCCTGCTGCCCCCCTGGCCTG
TCACCGACTTCTACACTCTTACTTCTATCTGCGCCATTGGCATCTGAACCAAATGAGCCAAGAGTTCTTGCAGCA
AAGCTTGAAAGAGGGTGAGGCTGCCCTCCACTATTTTGAGGAGCTTCCCTCTGCCAATGGCTCAGTGCCCCATTGT
CTGGCAGGCCACCCCCGGCCCTGGCTGGTGATCACCATCATCACTGTGGACAGGCAGCCTGGCTTCCACTACGT
CCTGCAGGTTGTGTCCAGTTCCACCGGCTTCTTCAGCAATGTGGCCCCCAGTGCGAGGGGCACCAACTCTTCCT
GTGCAACGTGGAGCGTAGTGTGAGCCATTTTGATGCCAAGTTGCTCTCCAAGTATGTCCCTGTGGCCAATCGCTA
TGAGGGCACTGAGGATGATTATGGTGATGACCCTTCGACCAACTCGTTTGAGAAAGAGAAGCAGGACTATGTCTA
TTGCCTGGAGTCATCCCTGCAGACCTACAACCCAGACTACGTCTGTAGGTAGAAGACGATGCTGTACCAGAAGA
GCAGATCTTCCCAGTCTTGAGCACCTTCTGCGGGCTCGCTTCTCTGAGCCACATCTCAGAGATGCCCTTTATCT
CAAGCTGTATCACCCGAGAGGCTCCAGCACTACATCAATCCAGAGCCCATGCGGATCCTGGAATGGGTTGGTGT
AGGCATGTTGCTGGGGCCCTTACTAACCTGGATATACATGAGGTTTGCCAGCCGCCAGGGTTTAGCTGGCCTGT
AATGCTCTTCTTCTCCCTGTATAGCATGGGTCTGGTGGAGCTGGTGGGTGGCACTATTTCTGGAAGTGCAGCG
GCTGAGTCCTTCCCTGTACAGTGTGGTTCCTGCCTCTCAGTGTGACCCAGCCATGCTCTTCCCGGCACCTGC
GGCCCGCCGGACCTCACCTACCTGTCCCAAGTGTAAGTGCACAAAGGGCTTTGGCAAGGACATGGCACTGTACTC
GCTGTTGAGGGCCAAGGGAGAGAGGGCCTATGTAGTGGAGCCGAACCTCGTGAAACACATCGGGCTCTTCTCCAG
TCTCCGGTACAACITTTATCCCAGTCTCCTCTAGGGTGCCAAGAGATGCCTTTCTGAAGTTGGCCACTTCTTGAA
GATTCAAATATTTATCTCTTTATTTAGACATGGTTGCCTGCAGGTATTTCACTGTTTACTGTTGTTAGAGATATA
GGCACTGGGGCAGCTGAGGAACCTCAATATGTTAAGAGCCTTGGCTTTGGTAGCCTCCTGGCAGGAGCAGCAGTT
TGCCACAGGTCCGGACCTCTCCCTCCACACAGCCACACTGCCTCATGCAGTCTGACCCACCCAGTGAGGGTGCAT
TTGAACACTGATTATATTCTCCATTTGTTTTTAAGCTCTGCTTTGTGTTAGAGCTTGTGACTGCCAAAAATTTTG
TGCACAGTGATATGACTGTTTTAGGATCTTAAGGGTAGAATTTTGTGAAAGGTGAGATCCTTTGGAATTGAGTTC
TTTCTCATTGGGTATGAAAATGGATGTATGTTTAGAATATATGCCCAACGAGGCAGGACCATGTGGATAGATTCC
ATTTGTTTCCTTGACCTGATGTAATAAAAACTGATAAAAGCCGTGCAGTGCCCGGCATCTTGGAATAAAAAAAAAA
AAAAAAAAA

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FIGURE 2747

MSTSTSPAAMLLRRLRRLSWGSTAVQLFILT VVTFGLLAPLACHRLLHSYFYLRHWHLNQMSQEFLOQSLKEGEA
ALHYFEELPSANGSVPIVWQATPRPWL VITIIITVDRQPGFHYVLQVVSQFHRLLQOCGPOCEGHQLFLCNVERSV
SHFDAKLLSKYVPVANRYEGTEDDYGDDPSTNSFEKEKQDYVYCLESSLQTYNPDYVLMVEDDAVP EEQIFPVLE
HLLRARFSEPHLRDALY LKLYHPERLQHYINPEPMRILEWVGVM L L G P L L T W I Y M R F A S R P G F S W P V M L F F S L Y
SMGLVELVGRHYFLELRRLSPSLYSVVPASQCCTPAMLF PAPAARRTLTYLSQVYCHKGF GKDMALYSLLRAKGE
RAYVVEPNLVKHIGLFSSLRYNFHP SLL

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FIGURE 2748

GAGATACGCGCACACACACACACAAAACGCACTCAGATTTCCCGGACCCTGGTTTTCTCCTGTGACCCTTTTCGGG
GCCGGGCTCTCACCCTAAAGAAGCAGCCCCGCCCTGGGGTGGCCCCACCCTCTCTTGGGACCTGTCATAAGTCGG
ACCCCGGGCGCCCGGCTGCGCAGTCCCAGCCGCCTTCCCCAGGCAGTGGAACCTTCGGGCTCCTGAGCTTCAGGA
TGGTTCGTACTAAGACATGGACCCTGAAGAAGCACTTTGTTGGCTATCCTACTAATAGTGACTTTGAGTTGAAGA
CAGCTGAGCTCCCACCCTTAAAAAATGGAGAGGTCTTGCTTGAAGCTTTGTTCCCTCACCCTGGATCCCTACATGA
GAGTGGCAGCCAAAAGATTGAAGGAAGGTGATACAATGATGGGGCAGCAAGTGGCCAAAAGTTGTGGAAAGTAAAA
ATGTAGCCCTACCAAAGGAACCTATTGTACTGGCTTCTCCAGGCTGGACAACGCACTCCATTTCTGATGGGAAAG
ATCTGGAAAAGCTGCTGACAGAGTGGCCAGACACAATACCACTGTCTTTGGCTCTGGGGACAGTTGGCATGCCAG
GCCTGACTGCCTACTTTGGCCTACTTGAATCTGTGGTGTGAAGGGTGGAGAAAACAGTGATGGTTAATGCAGCAG
CTGGAGCTGTGGGCTCAGTCGTGGGGCAGATTGCAAAGCTCAAGGGCTGCAAAGTTGTTGGAGCAGTAGGGTCTG
ATGAAAAGGTTGCCTACCTTCAAAGCTTGGATTGATGTCGTCTTAACTACAAGACGGTAGAGTCTTTGGAAG
AAACCTTGAAGAAAGCGTCTCCTGATGGTTATGATTGTTATTTTGATAATGTAGGTGGAGAGTTTTCAAACACTG
TTATCGGCCAGATGAAGAAATTTGGAAGGATTGCCATATGTGGAGCCATCTCTACATATAACAGAACCGGGCCAC
TTCCCCCAGGCCACCCCCAGAGATTGTTATCTATCAGGAGCTTCGCATGGAAGCTTTTGTCGTCTACCGCTGGC
AAGGAGATGCCCGCCAAAAGCTCTGAAGGACTTGCTGAAATGGGTCTTAGAGGGTAAAAATCCAGTACAAGGAAT
ATATCATTGAAGGATTTGAAAACATGCCAGCTGCATTTATGGGAATGCTGAAAGGAGATAATTTGGGGAAGACAA
TAGTGAAAGCATGAAAAGAGGACACATGGAATCTGGAGGCCATTTAGATGATTAGTTAATTTGTTTTTACCAT
TTAGCAAAAATGTATACTACCTTAAATGTCCTAAGAAATAGTACTCATAATGAGTTTGAGCTACTTAATAAAATA
CATTTAAGTGGTATGTAA

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FIGURE 2749

MVRTKTWTLKKHFVGYPTNSDFELKTAELPPLKNGEVLLLEALFLTVDPYMRVAAKRLKEGDTMMGQQVAKVVESK
NVALPKGTTIVLASPGWTTTHSISDGKDLEKLLTEWPDPTIPLSLALGTVGMPGLTAYFGLLEICGVKGGETVMVNAA
AGAVGSVVGQIAKLKGCKVVGAVGSDEKVAYLQKLGFDDVFNKYKTVESLEETLKKASPDGYDCYFDNVGGEFSNT
VIGQMKKFGRIAICGAISTYNRTGPLPPGPTPRDCYLSGASHGSFCRLPLARRCFFPKSSEGLAEMGLRG

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FIGURE 2750

GAACCTCCATCTTCCAGTAATTCGCCAAAATGACGAACACAAAGGGAAAGAGGAGAGGCTCCCGACATATGTTCT
CTAGGCCTTTTAGAAAACATGGAGTTGTTCCCTTTGGCCACGTATATGCGAATCTATAAGAAAGGTGATATTGTAG
ACATCAAGGGAATGGGTACTGTTCAAAAAGGAATGCCCCACAAGTGTACCATGGCAAACTGGAAGAGTCTACA
ATGTTACCCAGCATGCTGTTGGTATTGTAAACAAACAAGTTAAGGGCAAGATTCTTGCCAAGAGAATTAATGTGC
ATATTGAGCACATTAAGCACTCTGAGCCGAGATAGCTTCCTGAAATGTGTGAAGGAAAATGATCAGAAAAAGAAA
GAAGCCAAAGAGAAAGGTACCTGGGTTCAACTGAAGTGCCAGCCTGCTCCACCCAGAGAAGCACACTTTGTGAGA
ACCAATGGGAAGGAGCCTGAACTGCTGGAACCTATTCCCTATGAATTCATGGCATAATAGGTGTTTAAAAAATAA
ATAAATAAAAGACCTCTGGGCTGTTA

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FIGURE 2751

TGGACGGTCTGAAAGGGAGTGTTCCGGGTTTCGCTGGGGCCTCGCGGCTCCAGAGCCCAGCATGGCTTCCTCGCGA
GCCTCTTCCACGCAGGCAACCAAACTAAAGCACCCGACGACTTAGTTGCTCCGGTCGTGAAGAAACCACACATC
TATTATGGAAGTTTGGAAGAGAAGGAGAGGGAGCGTCTGGCCAAAGGAGAGTCTGGGATTTGGGGAAAGACGGA
CTTAAAGCAGGGATCGAAGCTGGAAATATTAATATAACCTCTGGAGAAGTGTTTGAATGAAGAGCGTATCAGC
GAGCGACAGGCAGAAGTATTGGCTGAGTTTGAGAGAAGGAAGCGAGCCCCGGCAGATCAATGTTTCCACAGATGAC
TCAGAGGTCAAAGCTTGCTTAGAGCCTTGGGGGAACCCATCACACTTTTGGAGAGGGTCTGCTGAAAGAAGA
GAAAGGTTAAGAAATATCTCTCAGTTGTCTGGTACTGATGCCTTGAAAAAGACCAAAAGGATGATGAGAAGTCT
AAAAAGTCCAAAGAAGAGTATCAGCAAACCTGGTATCATGAAGGACCAAATAGCTTGAAGGTGGCAGACTATGG
ATTGCTAATTATTCTGTTGCCAGGGCAATGAAACGCTTGGAAGAGGCCCGACTCCATAAGGAGATTCTGAGACA
ACAAGGACCTCCCAGATGCAAGAGCTGCACAAGTCTCTCCGGTCTTTGAATAATTTTGCAGTCAGATGGGGAT
GATCGGCCTATCTCCTACTGTCACTTTAGTCCCAATTCCAAGATGCTGGCCACAGCTTGTGGAGTGGGCTTTGC
AAGCTCTGGTCTGTTCTGATTGCAACCTCCTTCACTCTTCGAGGGCATAACACAAATGTAGGAGCAATTGTA
TTCCATCCCAAATCCACTGTCTCCTTGGACCCAAAAGATGTCAACCTGGCCTCTTGTGCGGCTGATGGCTCTGTG
AAGCTTTGGAGTCTCGACAGTGATGAACAGTGGCAGATATTGAAGGCCATACAGTGCGTGTGGCGCGGGTAATG
TGGCATCCTTCAGGACGTTTCTGGGCACCACCTGCTATGACCGTTTCATGGCGCTTATGGGATTTGGAGGCTCAA
GAGGAGATCCTGCATCAGGAAGGCCATAGCATGGGTGTGTATGACATTGCCTTCCATCAAGATGGCTCTTTGGCT
GGCACTGGGGGACTGGATGCATTTGGTTCGAGTTTGGGACCTACGCACAGGACGTTGTATCATGTTCTTAGAAGGC
CACCTGAAAGAAATCTATGGAATAAATTTCTCCCCAATGGCTATCACATTGCAACCGGCAGTGGTGACAACACC
TGCAAAGTGTGGGACCTCCGACAGCGGCGTTGCGTCTACACCATCCCTGCTCATCAGAACTTAGTGACTGGTGTC
AAGTTTGAGCCTATCCATGGGAACCTTCTTGCTTACTGGTGCCTATGATAACACAGCCAAGATCTGGACGCACCCA
GGCTGGTCCCCGCTGAAGACTCTGGCTGGCCACGAAGGCAAAGTGATGGGCCTAGATATTTCTCCGATGGGCAG
CTCATAGCCACTTGCTCATATGACAGGACCTTCAAGCTGTGGATGGCTGAATAGATGACAATGGGAAAAGGACTT
GAACCTCAAGCTCTCTCTAAGGAGCTGTTTTCTCAAACGAGAAGAATTGAAGTGTTTAGTTCTATCATGTTTTT
TGCCAATTACCATGCATAGACCCTCAGTAGAATTGGATTTCCATGTCAGCCCCACTCCAGGAAGGCAGCCCAAT
CCCTAGGTGATGGGGAACCCCTCTCACGGTTGAAAATTTATTACCTTTTTACGCCCTGCCACGAACGTGTAGAC
ATTGTTTTTATTAATCTTTTGTGGCCGGGCGTGGTGGCTCACGCCGTGTAATCCTAGCACTTTGGGAGGCCGAG
GTGGGTAGATCGCTTGAGCTCAGGAGTTCAAGACGAGCCTGGGCAACATGGCAAATGCCGTCTCTGCAAAAAAAT
ACTAAAATTAGCTGGTCGCGGTGGCTTCTGCCTGTGATTCCGGCTACTTGGGAGGCTGAGGTGGGAGGGATTGCT
TAAGCCTGGGAGGCAGAGGTTGCAGTGAGCCGAGATTGCGCCATTGCACTCTAGCCTGTGTGACAGAGCAAGACC
CTGTCTCAAAA

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FIGURE 2752

MASSRASSTQATKTKAPDDLVPVVKKPHIYYGSLEEKERERLAKGESGILGKDGLKAGIEAGNINITSGEVF
EERISERQAEVLAEFERRKRARQINVSTDDSEVKACLRALGEPITLFGEGPAERRERLRNLSVVGTDALKKTKK
DDEKSKKSKEEYQQTWYHEGPNSLKVARLWIANYS LPRAMKRLEEALHKEIPETTRTSQMQLHKSLSLNNFC
SQIGDDRPISYCHFSPNSKMLATACWSGLCKLWSVPDCNLLHTLRGHNTNVGAIVFHPKSTVSLDPKDVNLASCA
ADGSVKLWSLDSDEPVADIEGHTVRVARVMWHPSGRFLGTTTCYDRSWRLWDLEAQEEILHQEGHSMGVYDIAFHQ
DGSLAGTGGLDAFGRVWDLRTGRCIMFLEGLHKEIYGINFSPNGYHIATGSGDNTCKVWDLRQRRCVYTIPAHQN
LVTGVKFEP IHGNFLLTGAYDNTAKIWITHPGWSPLKTLAGHEGKVMGLDISSDGQLIATCSYDRTFKLWMAE

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FIGURE 2753

GGCACGAGGGACGCGGGAAGTCCGGACGCAGTAGCTCCCTGAAGCGGAGGCGAAGGGGAGTTTAAGCCCCAGCGG
CGGCAATGGCGGAGAGGGCCCGAGGACCTAAACCTGCCCAATGCCGTGATCACCAGGATCATCAAGGAGGCGCTCC
CGGACGGTGTCAACATCTCCAAGGAGGCCCCGAGCGCCATCTCCCGCGCCGCCAGCGTCTTCGTGCTGTACGCCA
CATCCTGTGCTAACAACCTTTGCAATGAAAGGAAAGCGGAAGACGCTGAATGCCAGTGATGTGCTCTCAGCCATGG
AAGAGATGGAGTTCAGCGGTTTCGTTACCCCATTTGAAAGAAGCTCTGGAAGCATATAGCGGGGAGCAGAAAGGCA
AGAAGGAGGCCTCAGAGCAAAAGAAGAAGGACAAAGACAAAAAACAGACTCGGAAGAGCAAGACAAGAGCAGGG
ATGAGGACAATGATGAAGACGAAGAAAGGCTGGAAGAAGAAGAACAGAATGAAGAGGAAGAAGTAGACAACTGAA
AAGGGCGGGAGACTGTGGCACCTTGGAAGGTACCCTTGAATGAGACGTGCTACGTGTTTCTGTGAAGCTTTTC
CATGCTGGGCAGAGTAGTCTCAGGCAAAAGTGCCTGAAAAGATCAGAATAAAAACTGACTAGAAATACCGTCAAA
ACCAGCACTTACCAAACCTCAGAGCATCTGAGTAGCAGAATCCTGTTTTGCTTCATCAATCTGAAGGTTATGGCCT
TTTGACAAGAGGGATTCTGAACGACTAAATTAGTCAGTTTGCTCGCTTTTGTCTTAAATGTATGGTTAGATG
GTTTTTGATCTGCAGTCTTCCCTAGTCCCCCAAATAAGTAATAATAACTTCCATGCTGCCTGCTGTGTCCAGAT
CACAGAGGCAGCCAAGGCTCAGGAAAACTGGGGCTTTGCTTATGGTCAGCCTATGTTTGATTGCACAGTCTTTG
ACAATAGTAGCTTACTAAGACTGCTCAGAATGAGTAAGCTTTAGGAACTACTAAAATGCTGTGGGAGAAATAACA
AAATCCGTTCTCTCTCTTCACTTGACAGAAGCATTAACTGAATTTTGTCTTTTCATAGACCCACTTGGCCCCAAAC
CTTTCTATATTGCCTGTAGATGATCGGCCTGCTGGTGTGGTAGTAATCTGATCACAGATATTCTTAAATCAGCAG
TGTGGAATGGTATTAGTCAAACATGGTGCCAGTGTCTTTTACAAAAACAGATGGCATAGTGTGAGATGTACCTTA
CTCTCTGCTACTGTACAGCTTTAGGATTTGTCTACCTCCCGGAAGGTGTAAAACCCAGGCTTCCTCTTCTTG
TAGTCCATCTCCCAGACTTGTGACTATGGCTTTTCACTTCTCAATTCATGACGAGTGCCAACTTGATTTTCTCT
AGGCACAGCTTTCTCCCTCTGTGCCTCCTGCTTCTCTCTCTCCTGCCTCTCCTCTGCTCCCCATCCCCTTTCT
CATCTGCCTCCTTTTCTCACTTCTGTGAGTCTGTAAGCTTTGATAACCTGCTTAATACTCCAAAGTGTGAGTTCC
TCTGATCTCTTGATTCTTAGTTCTAATCTCACGTTTTGTTTTTAAGAGATGGAGTCTCTCACTCTGTGGCCAG
GCTGGAGTGCAGTGGCATGATCATAGCTCATTGCATCCTTGAATCCTGGGCTCAGGTGATCCTCCCGCCTGAGC
CTCCTGAGTATCTGGGACTACAGATGCGTGCCACCAAGCCTGGCTAATTTTGTCTCATGTCTTCTAAAAATTATT
TTGTGAAGCCCCTTCAAAAAACCTTAAGGGAAATCTGATGGTGTCTCAGGAATCTAACTCTCCCTAAACCATCC
TCTTTAACTGCTTCTAAAAATATCTCTGTTGGCCTTTTCTTAGCCTTTTTCTGTTTCCATTGAGTGTCCAAGCGCT
TTTTGTTTCTAAGTTGAGTGCITGGGGTTTGACAGGTAGTGACGTGTAGTTTGACACTGTTAACTTGTAAATAC
AGTGAAGTTTGTGAGTGAAGAATGCTGAGAAGATTGTAATGCTTTGTACAAATAAAAGTCTTGTAAAAAAA
AAAAAAAAAAAAAA

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FIGURE 2754

MAERPEDLNLPNAVITRIIKEALPDGVNISKEARSAISRAASVFVLYATSCANNFAMGKRKTLNASDVLSAMEE
MEFQRFVTPLKEALEAYRREQKGKKEASEQKKKDKDKKTDSEEQDKSRDEDNDEDEERLEEEEQNEEEVDN

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FIGURE 2755A

ACCGGCCACAGCCTGCCTACTGTCACCCGCCTCTCCCGCGCGCAGATACACGCCCCCGCCTCCGTGGGCACAAAG
GCAGCGCTGCTGGGGAACCTCGGGGAACGCGCACGTGGGAACCGCCGCAGCTCCACACTCCAGGTACTTCTTCCA
AGGACCTAGGTCTCTCGCCCATCGGAAAGAAAATAATTCTTTCAAGAAGATCAGGGACAACCTGATTGAGTCTA
CTCTGTGCTTCTAAATCCCCAATTCTGCTGAAAGTGAGATACCCTAGAGCCCTAGAGCCCCAGCAGCACCAGCC
AAACCCACCTCCACCATGGGGGCAATGACTCAGCTGTTGGCAGGTGTCTTCTTGCTTTCTTGGCCCTCGCTACC
GAAGGTGGGGTCTCTAAGAAAGTCATCCGGCACAAGCGACAGAGTGGGGTGAACGCCACCCTGCCAGAAGAGAAC
CAGCCAGTGGTGTTTAACCAGTTTACAACATCAAGCTGCCAGTGGGATCCCAGTGTTCGGTGGATCTGGAGTCA
GCCAGTGGGGAGAAAGACCTGGCACC GCCTTCAGAGCCCAGCGAAAGCTTTCAGGAGCACACAGTGGATGGGGAA
AACCAGATTGTCTTCACACATCGCATCAACATCCCCCGCCGGGCCTGTGGCTGTGCCGCAGCCCCCTGATGTTAAG
GAGCTGCTGAGCAGACTGGAGGAGCTGGAGAACCTGGTGTCTTCCCTGAGGGAGCAATGTACTGCAGGAGCAGGC
TGCTGTCTCCAGCCTGCCACAGGCCGCTTGGACACCAGGCCCTTCTGTAGCGGTGGGGCAACTTCAGCACTGAA
GGATGTGGCTGTGTCTGCGAACCTGGCTGGAAAGGCCCAACTGTCTGAGCCCGAATGTCCAGGCAACTGTCAC
CTTCGAGGCCGGTGCATTGATGGGCAGTGCATCTGTGACGACGGCTTCACGGGCGAGGACTGCAGCCAGCTGGCT
TGCCCCAGCGACTGCAATGACCAGGGCAAGTGCCTAAATGGAGTCTGCATCTGTTTCGAAGGCTACGCCGGGGCT
GACTGCAGCCGTGAAATCTGCCCAGTGCCTGTCAGTGAGGAGCACGGCACATGTGTAGATGGCTTGTGTGTGTGC
CACGATGGCTTTGCGAGCGATGACTGCAACAAGCCTCTGTGTCTCAACAATTGCTACAACCGTGGACGATGCGTG
GAGAATGAGTGCCTGTGTGATGAGGGTTTCACGGGCGAAGACTGCAGTGAGCTCATCTGCCCAATGACTGCTTC
GACCGGGGCCGCTGCATCAATGGCACCTGCTACTGCGAAGAAGGCTTCACAGGTGAAGACTGCGGGAAACCCACC
TGCCCCACATGCCTGCCACACCCAGGGCCGGTGTGAGGAGGGGCAGTGTGTATGTGATGAGGGCTTTGCCGGTGTG
GACTGCAGCGAGAAGAGGTGTCTGTGACTGTGACAATCGTGGCCGCTGTGTAGACGGGCGGTGTGAGTGTGAT
GATGGTTTCACTGGAGCTGACTGTGGGGAGCTCAAGTGTCCCAATGGCTGCAGTGGCCATGGCCGCTGTGTCAAT
GGCAGTGTGTGTGTGATGAGGGCTATACTGGGGAGGACTGCAGCCAGCTACGGTGCCCCAATGACTGTGACAGT
CGGGGCCGCTGTGTGCGAGGGCAAATGTGTATGTGAGCAAGGCTTCAAGGGCTATGACTGCAGTGACATGAGCTGC
CCTAATGACTGTCAACCAGCACGGCCGCTGTGTGAATGGCATGTGTGTTTGTGATGACGGCTACACAGGGGAAGAC
TGCCGGGATCGCCAATGCCCCAGGGACTGCAGCAACAGGGGCCCTCTGTGTGGACGGACAGTGCGTCTGTGAGGAC
GGCTTCACCGGCCCTGACTGTGCGAAGCTCTCTGTCCAAATGACTGCCATGGCCAGGGTTCGTGTGTGAATGGG
CAGTGCGTGTGCCATGAAGGATTTATGGGCAAAGACTGCAAGGAGCAAAGATGTCCAGTGACTGTGATGGCCAG
GGCCGCTGCGTGGACGGCCAGTGCATCTGCCACGAGGGCTTCACAGGCCTGGACTGTGGCCAGCACTCCTGCCCC
AGTGAAGTGAACAACCTTAGGACAATGCGTCTCGGGCCGCTGCATCTGCAACGAGGGCTACAGCGGAGAAGACTGC
TCAGAGGTGTCTCTCCCAAAGACCTCGTTGTGACAGAAGTGACGGAAGAGACGGTCAACCTGGCCTGGGACAAT
GAGATGCGGGTCACAGAGTACCTTGTGCTGTACACGCCACCCACGAGGGTGGTCTGGAAATGCAGTTCGGTGTG
CCTGGGGACAGAGCTCCACCATCATCCAGGAGCTGGAGCCTGGTGTGGAGTACTTTATCCGTGTATTGCCATC
CTGGAGAACAAGAAGAGCATCTCTGTGACGCGCCAGGGTGGCCACGTACTTACCTGCACCTGAAGGCCTGAAATTC
AAGTCCATCAAGGAGACATCTGTGGAAGTGGAGTGGGATCCTCTAGACATGCTTTTGAACCTGGGAGATCATC
TTCCGGAATATGAATAAAGAAGATGAGGGAGAGATCACCAAAGCCTGAGGAGGCCAGAGACCTTTACCGGCCAA
ACTGGTCTAGCTCCTGGGCAAGAGTATGAGATATCTCTGCACATAGTGAAAAACAATACCCGGGGCCCTGGCCTG
AAGAGGGTGACCAACACACGCTTGGATGCCCCCAGCCAGATCGAGGTGAAAGATGTACAGACACCACTGCCTTG
ATCACCTGGTTCAAGCCCCTGGCTGAGATCGATGGCATTGAGCTGACCTACGGCATCAAAGACGTGCCAGGAGAC
CGTACCACCATCGATCTCAGAGGACGAGAACCAGTACTCCATCGGGAACCTGAAGCCTGACACTGAGTACGAG
GTGTCCCTCATCTCCCGCAGAGGTGACATGTCAAGCAACCCAGCCAAAGAGACCTTCACAACAGGCCTCGATGCT
CCCAGGAATCTTCGACGTGTTTCCCAGACAGATAACAGCATCACCTGGAATGGAGGAATGGCAAGGCAGCTATT
GACAGTTACAGAAATTAAGTATGCCCCCATCTCTGGAGGGGACCAAGCTGAGGTTGATGTTCCAAAGAGCCAAACA
GCCACAACCAAAACCACTCACAGGTCTGAGGCCGGAACTGAATATGGGATTGGAGTTTCTGCTGTGAAGGAA
GACAAGGAGAGCAATCCAGCGACCATCAACGACCCACAGAGTTGGACACGCCCAAGGACCTTCAGGTTTCTGAA
ACTGCAGAGACCAAGCCTGACCTGCTCTGGAAGACACCGTTGGCCAAATTTGACCGCTACCGCCTCAATTACAGT
CTCCCCACAGGCCAGTGGGTGGGAGTGCAGCTTCCAAGAAACACCACTTCCTATGTCTGAGAGGCCTGGAACCA
GGACAGGAGTACAAATGCTCTCTGACAGCCGAGAAAGGCAGACACAAGAGCAAGCCCGCACGTGTGAAGGCATCC
ACTGAACAAGCCCCCTGAGCTGGAAAACCTCACCGTGAAGTGGCTGGGATGGCCTCAGACTCAACTGGACC

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FIGURE 2755B

GCAGCTGACCAGGCCTATGAGCACTTTATCATTAGGTGCAGGAGGCCAACAAAGGTGGAGGCAGCTCGGAACCTC
 ACCGTGCCTGGCAGCCTTCGGGCTGTGGACATACCGGGCCTCAAGGCTGCTACGCCTTATACAGTCTCCATCTAT
 GGGGTGATCCAGGGCTATAGAACCAGTGTCTCTGCTGAGGCCTCCACAGGGGAACTCCCAATTTGGGAGAG
 GTCGTGGTGGCCGAGGTGGGCTGGGATGCCCTCAAACCTCAACTGGACTGCTCCAGAAGGGGCCATGAGTACTTT
 TTCATTAGGTGCAGGAGGCTGACACAGTAGAGGCAGCCAGAACCTCACCGTCCCAGGAGGACTGAGGTCCACA
 GACCTGCCTGGGCTCAAAGCAGCCACTCATTATACCATCACCATCCGCGGGTCACTCAGGACTTCAGCACAAACC
 CCTCTCTCTGTTGAAGTCTTGACAGAGGAGGTTCCAGATATGGGAAACCTCACAGTGACCGAGGTTAGCTGGGAT
 GCTCTCAGACTGAACTGGACCACGCCAGATGGAACCTATGACCAGTTTACTATTAGGTCCAGGAGGCTGACCAG
 GTGGAAGAGGCTCACAATCTCACGGTTCCTGGCAGCCTGCGTTTCATGGAATCCCAGGCCTCAGGGCTGGCACT
 CCTTACACAGTCAACCTGCACGGCGAGGTGAGGGGCCACAGCACTCGACCCCTTGCTGTAGAGGTGCTCACAGAG
 GATCTCCACAGCTGGGAGATTTAGCCGTGTCTGAGGTTGGCTGGGATGGCCTCAGACTCAACTGGACCGCAGCT
 GACAATGCCTATGAGCACTTTGTCAATTAGGTGCAGGAGGTCAACAAAGTGGAGGCAGCCAGAACCTCACGTTG
 CCTGGCAGCCTCAGGGCTGTGGACATCCCGGGCCTCGAGGCTGCCACGCCTTATAGAGTCTCCATCTATGGGGTG
 ATCCGGGGCTATAGAACCAGTACTCTCTGCTGAGGCCTCCACAGCCAAAGAACCTGAAATTGGAACCTTAAAT
 GTTCTGACATAACTCCCGAGAGCTTCAATCTCTCCTGGATGGCTACCGATGGGATCTTCGAGACCTTTACCAIT
 GAAATTATTGATTCCAATAGGTTGCTGGAGACTGTGGAATATAATATCTCTGGTGTGTAACGAACTGCCCATATC
 TCAGGGCTACCCCTAGTACTGATTTTATTGTCTACCTCTCTGGACTTGCTCCCAGCATCCGGACCAAAACCATC
 AGTGCCACAGCCACGACAGAGGCCCTGCCCCCTCTGGAACCTAACCATTTCCGACATTAATCCCTACGGGTTT
 ACAGTTTTCTGGATGGCATCGGAGAATGCCTTTGACAGCTTTCTAGTAACGGTGGTGGATTCTGGGAAGCTGCTG
 GACCCCCAGGAATTCACACTTTTACGGAACCCAGAGGAAGCTGGAGCTTAGAGGCCTCATAACTGGCATTGGCTAT
 GAGGTTATGGTCTCTGGCTTCACCCAAGGGCATCAAACCAAGCCCTTGAGGGCTGAGATTGTTACAGAAGCCGAA
 CCGGAAGTTGACAACCTTCTGGTTTTAGATGCCACCCAGACGGTTTTCCGTCTGTCTGGACAGCTGATGAAGGG
 GTCTTCGACAATTTTGTCTCAAATCAGAGATACAAAAAGCAGTCTGAGCCACTGGAATAAACCTACTTGCC
 CCCGAACGTACCAGGGACATAACAGGTCTCAGAGAGGCTACTGAATACGAAATTGAACCTCTATGGAATAAGCAAA
 GGAAGGCGATCCCAGACAGTCACTGCTATAGCAACAACAGCCATGGGCTCCCCAAAGGAAGTCATTTTCTCAGAC
 ATCACTGAAAATTCGGCTACTGTGCTGAGGGGCACCCACAGCCCAAGTGGAGAGCTTCCGGATTACCTATGTG
 CCCATTACAGGAGGTACACCTCCATGGTAACCTGTGGACGGAACCAAGACTCAGACCAGGCTGGTGAACTCATA
 CCTGGCGTGGAGTACCTTGTGAGCATCATCGCCATGAAGGGCTTTGAGGAAAGTGAACCTGTCTCAGGGTCATTC
 ACCACAGCTCTGGATGGCCCATCTGGCCTGGTGACAGCCAACATCACTGACTCAGAAGCCTTGCCAGGTGGCAG
 CCAGCCATTGCCACTGTGGACAGTTATGTCTCTCTACACAGGCGAGAAAGTGCCAGAAATTACACGCACGGTG
 TCCGGGAACACAGTGGAGTATGCTCTGACCGACCTCGAGCCTGCCACGGAATACACACTGAGAATCTTTGCAGAG
 AAAGGGCCCCAGAAGAGCTCAACCATCACTGCCAAGTTCACAACAGACCTCGATTCTCCAAGAGACTTGACTGCT
 ACTGAGGTTCACTCGGAACTGCCCTCCTTACCTGGCGACCCCCCGGGCATCAGTCACCGGTTACCTGCTGGTC
 TATGAATCAGTGGATGGCACAGTCAAGGAAGTCAATTGTGGGTCCAGATACCACCTCCTACAGCCTGGCAGACCTG
 AGCCCATCCACCCACTACACAGCCAAGATCCAGGCACTCAATGGGCCCTGAGGAGCAATATGATCCAGACCATC
 TTCACCACAATTGGACTCCTGTACCCCTTCCCCAAGGACTGCTCCCAAGCAATGCTGAATGGAGACACGACCTCT
 GGCTCTACACCATTTATCTGAATGGTGATAAGGCTGAGGCGCTGGAAGTCTTCTGTGACATGACCTCTGATGGG
 GGTGGATGGATTGTGTTCTTGAGACGCAAAAACGGACGCGAGAACTTCTACCAAACTGGAAGGCATATGCTGCT
 GGATTTGGGGACCGCAGAGAAGAATTCTGGCTTGGGCTGGACAACCTGAACAAAATCAGAGCCAGGGGCAGTAC
 GAGCTCCGGGTGGACCTGCGGGACCATGGGGAGACAGCCTTTGTGTCTATGACAAGTTCAGCGTGGGAGATGCC
 AAGACTCGCTACAAGCTGAAGGTGGAGGGGTACAGTGGGACAGCAGGTGACTCCATGGCCTACCACAATGGCAGA
 TCCTTCTCCACCTTTGACAAGGACACAGATTGAGCCATACCAACTGTGCTCTGTCTACAAAGGGGCTTTCTGG
 TACAGGAACCTGTACCGTGTCAACCTGATGGGGAGATATGGGGACAATAACCAAGTCAAGGCGTTAACTGGTTC
 CACTGGAAGGGCCAGAACACTCAATCCAGTTTGTGTGATGAAGTGAAGCAAGCAACTTCAGAAATCTTGAA
 GGCAGGCGCAACGGGCATAAATTCCAGGGACCCTGGGTGAGAGAGGAATAAGGCCAGGCGAGGAAGGATT
 TTACCAAGCATCAATACAACGCCCAACCATCGGTCCACACCTGGGCATTTGGTGAGAGTCAAAGCTGACCAT
 GGATCCCTGGGGCCAACGGCAACAGCATGGGCCTCACCTCCTCTGTGATTTCTTTCTTTGCACCAAGACATCAG
 TCTCCAACATGTTTCTGTTTTGTTGTTTGATTAGCAAAAATCTCCAGTGACAACATCGCAATAGTTTTTACT

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FIGURE 2755C

TCTCTTAGGTGGCTCTGGGAATGGGAGAGGGGTAGGATGTACAGGGGTAGTTTGTGTTTGAACAGCCGTATTTT
ACATGAAGCTGTATAATTAATTGTCATTATTTTTGTTAGCAAAGATTAAATGTGTCATTGGAAGCCATCCCTTTT
TTTACATTTTATACAACAGAAACCAGAAAAGCAATACTGTTTCCATTTTAAGGATATGATTAAATATTATTAATAT
AATAATGATGATGATGATGATGATAAACTAAGGATTTTTCAAGAGATCTTTCTTTCCAAAACATTTCTGGACAGTA
CCTGATTGTATTTTTTTTTTAAATAAAAAGCACAAAGTACTTTTG

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FIGURE 2756

TTCAGATGTATGTTTATGTTTCTGACCTTGCGCTACCCCAAGTGCAGGCTCCAAACAGGCATGCGAGGTGCCTTTG
GAAAGCCCCAGGGCACTGTGACCAGGGTTACATTGGCCAAGTTATCATGTCCATCCACACCAAGCTGCAGAACA
AGGAGCATGTAATTGAGGCCCTGCGCAGGGCCAAGTTCAAGTTTCCTGGCCACCAGAAGATCCGCATCTCAAAGA
AGTGGGGCTTCACCAAGTTCAATGTTGATGAATTTGAAGACATGGTGGCTGAGAAGCAGCTCATCCCTGATGGCT
GTGGGGTCAAGTACATCCCCAGTCGTGGCCCTCTGGACAAGTGGCGGGCCCTGCACTCATGAGGGCTTCCACTGT
GCTGCCCCCTCTTAATACTCACCAATAAATTCTACTTCCTGTCC

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FIGURE 2757

TCCCTTCAGCCGCCATCATGATTATCTACCAGGACCTCATCAGTCACAATGAGATGTTCTCCGACATCTAGAAGA
TCTGGGAGATTGTGGACGGGCTGTGCTGGGAGGTGGTGGGGAAAATGGTCAGTAGGACAGAAGGTAACATTGATG
ACTCGCTCATTGGTGGAAATGTCTCCGCTGAAGGCCCGAGGGTGAAGGTACCGAAAGCACAGTAATCACTGCTG
TCGATGTTGTTCATGAACCATCACCTGCAGGAAACAAGTTTCACAAAAGAAGCCCACAAGAAGTACATCAAAGATT
ACATGAAATCAATCAAAGGCAAACTTGAAGAACTGAGACCAGAAAGAGTAAAACCTTTTATGACAGGGGCTGCAG
AACAAATCAAGCACATCCTTGCTAATTTCAAAAACCTACCATTTCTTTATTGGTGAAAACATGAATCCAGATGGCA
TGGTTGCTCTACTGGACTACGGTGAGGATGGTGTGACCCCATATATGATTTTCTTTAGGGATGGTTTAGAAACGG
AAAAATGTTAACAAATTTGGCAATTAGTTTGATCTATTACCTGTCATCATAACTCGCTTCTAATTGTCATCCAC
ACAACACCAGGACCTAAGACAAATGGGACTAATATCATCTTGAGCTCTTCATTTATTTTACCATAATTTATTTCG
GAGTGGAGGCATTGTTTTTAAGAAAAACATGTCATGTAGGTTGTCTAAAAATAAAATGCATTTTAACTCATTGGA
GAGAATACCTTTTCGTTTAATGCATATTTAACTAAATTCATCCTGTTGTGTTCCCTGGAGAAGCTACAGCCTGGT
CATAAGCTACTACTAGAAAGAGTAAGACTCATCAATTAACCTTCTACAGTGGAAGTACTTCTGGGACTGGAATAT
ACAAAAAATCAAAGGTTTTGATTGTGTGTTGCAATAAAGGGAAAGACCATGTTTCATAGCAGTGCCAACATCTG
AAGTGGAGCTTTACGCATTTTCATCACCTACAATGGAATTAGTTAACTGGAAGAGATTACCAAGAGAATAAAAAAGA
GACGAATTCAGCTGGAAAAAAAAA

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FIGURE 2758

MVSRTEGNIDDSLIGGNVSAEGPEGEGTESTVITAVDVVMNHHLQETSFTKEAHKKYIKDYMKSIGKLEELRPE
RVKPFMTGAAEQIKHILANFKNYHFFIGENMNPDGMVALLDYGEDGVTPYMIFFRDGLETEKC

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FIGURE 2759A

AGGTTGAAGAACTTAACTCTGAAATTGAAAAGCTCAGTGCTGCCTTTTGCTAAAGCCAGAGAGGCCCTACAGAAAG
CACAGACCCAGGAATTTTCAGGGGTCTGAAGACTATGAGACTGCTCTATCAGGAAAGGAAGCCCTTTCGGCTGCGC
TGCGCTCACAAAACCTCACCAAGAGTACAGAGAACCACAGACTGCGTAGAAGCATTAAAGAAGATCACCCAGGAGC
TGAGTGACTTGAGCAGGAGAGGGAGAGACTGGAGAAGGACCTGGAGGAAGCCCATCGAGAGAAGAGCAAAGGAG
ACTGCACCATCCGTGATCTTAGAAATGAAGTTGAAAAATTACGCAATGAAGTGAATGAAAGAGAGAAAGCAATGG
AAAAATCGTTACAAGAGTCTTCTGAGTGAAAGCAATAAAAAATTGCACAATCAAGAGCAAGTGATCAAACATCTAA
CAGAAAGTACCAATCAGAAGGACGTGTTGCTTCAGAAATTCAATGAAAAAGATTTGGAAGTAATACAGCAGAACT
GCTATTTAATGGCTGCAGAGGATCTTGAGCTCAGGAGTGAAGGCTTAATAACAGAAAAGTGCTCTTCTCAACAGC
CACCAGGCAGCAAAAACCATCTTCTTAAGGAAAAGAAACAATCATCAGACTATGAAGAGCTGATTGAGGTCTTAA
AGAAAGAGCAGGACATCTATACCATCTGGTCAAATCTCTGCAGGAATCAGACAGTATCAACAACCTGCAGGCTG
AGTTAAACAAGATTTTTCGCTGCGGAAGCAACTGGAGCAGGATGTGCTTTTCATATCAGAAATTTGCGGAAGACCT
TGGAGGAGCAGATCAGCGAAATTCGGAGGCGGGAAGAAGAATCATTTTCACTTTATAGTGATCAAACATCTTATC
TAAGTATTTGCCTTGAAGAAAACAATCGGTTTCAAGTGAACATTTTCTCAAGAAGAACTTAAGAAAAAGGTCA
GTGACCTTATACAGCTAGTGAAGGAGCTGTATACAGACAACCAGCACCTGAAGAAAACCATTTTTGATCTCTCCT
GCATGGGTTTCCAGGGAAATGGGTTTCCAGATAGACTTGCGTCTACAGAAACAAACAGAGCTTCTGGCTAGCAAGG
AGGACGAGGACACGATCAAAATTTGGGAGGATGACGAGATTAATTTTCTGAGTGACCAGCATTTGCAGCAGAGTA
ATGAGATTATGAAAGACCTTTCCAAAGGAGGCTGCAAAAATGGATACTTAAGGCACACGGAGTCTAAGATTTTCAG
ATTGTGATGGGGCCCACGCACCTGGCTGCCTAGAAGAAGGTGCATTATATAACCTGCTTGCCCTTTGTTCATG
AGAAGGCCACATTATTACTGGAATCCAGGCCAGACCTTCTGAAAGTGGTACGGGAAGTCTTCTGGGACAACAT
TCTTGACAGAGCAGGAAGTTTCTGGAGAACACCTTGATGGTAAAACTGAGAAGACACCTAAGCAAAAAGGTGAAC
TTGTACATTTTGTCCAAACCAACTCATTTTCCAAGCCACATGATGAAGTGAAGTTGTCTTGTGAGGCCCAGCTAG
TAAAGGCAGGCGAAGTGCCCAAGGTAGGACTGAAAGATGCCTCAGTGACAGCTGTGGCCACGGAGGGCGACCTGC
TGAGATTCAAGCATGAAGCAACAAGAGAGGCTTGGAAGAGAAAACCGATCAACACTGCACTCAGCGCAGAGCATC
GGCCAGAGAACCTGCACGGGGTGCTGGGTGGCAGGCTGCCCTCCTTTCCCTCCCTGGTATTACCAACAGAGAGG
CTAAGAAGTCCCGCTTGCCAATCCTAATAAAACCATCCCCGGTCATTAGGAAATATGTATCGTCTCCCTGCCACCC
AGGAGGTGGTGACGCAGCTGCAGAGCCAGATCTTGAGCTGCAGGGGGAGCTGAAGGAGTTTAAACTTGTAATA
AGCAACTTCACCAAAAGTTAATTCTGGCTGAAGCAGTGATGGAGGGGAGGCCAACGCCCGACAAAACGTTGCTGA
ATGCTCAGCCCCCTGTGGGAGCAGCCTACCAGGACAGCCAGGAGAGCAGAAAGGAATTAACACCATCTTCTG
TCTGGAGAGACAAGGAAATGGACAGTGATCAGCAAAGAAGCTACGAGATTGACTCTGAGATTTGCCACCTGATG
ACCTTGCCAGCTTGCCATCATGCAAAGAAAATCCTGAAGATGTTCTGAGCCCACTTCAGTAGCTACTTACCTGA
GTTCCAAGAGTCAGCCTTCTGCTAAAGTCAGTGTGATGGGGACTGATCAGTCAGAGAGCATTAAATACCTCAAATG
AGACAGAATACTTAAACAGAAAATCCATGACTTGGAAGTGAAGCTGGAAGGCTACCAGAATTTTCATATTTTCAGC
TTCAAAGCACTCCAGTGACGTGAGGCCATAATTACAGTTTTGTGTGGGACAGAAGGGGCCAGGATGGCTTGA
GCAAGCCCAAGAATGGTTCTGATGGGGAAGAAATGACCTTTTCAAGTTTGACCAAGTGCGATACGTGAAACACG
TGAAATCCTCGGTCCGCTGGCCCCAGAGATGATTGACAGCAGGGTGCTGGAGAACCTCAAACAGCAGCTGGAGG
AACAGGAATACAAGCTGCAGAAGGAGCAGAAATTTGAACATGCAACTTTTCAGTGAGATCCATAATCTGCAGAATA
AGTTCAGAGATCTCTCACCTCCCAGATACGATTCAATAGTTTCAGTCCCAAGCCAGGGAGCTCTCCCTTCAACGGC
AGCAGATTAAGGATGGCCATGGCATCTGTGTCTCTCCCGTCAACACATGAACACCATGAACACCATTTGAGG
AGTTGCTGCAGGCCAGTGATGTGATTACTGTGTGGCCGAGGGTTTCCAGGAACAGCTGAATCAATGTGCTGAGC
TGCTGGAGAAATTGGAAAAGCTATTTCTCAACGGAAAATCAGTTGGAGTGGAAATGAACACCCAGAATGAAGTGA
TGGAGAGGATTGAGGAAGACAACCTAACCTACCAACATCTTCTGCCTGAATCTCCTGAGCCTTCAGCCTCTCATG
CGCTCTCTGATTATGAAACATCTGAAAAGTCTTCTTCTCAGAGACCAGAAGCAAGATAATGAGACAGAGAAGA
CTTCAGTTATGGTGAACAGTTTTTCTCAAGACTTACTAATGGAACACATACAGGAAATTCGAACCTTTGAGAAAAGC
GTTTGAAGAATCTATTAAACAATGAGAAGCTACGGAACAGTTGGAACGGCAAGGATCTGAATTTGTTCAAG
GTTCTACAAGCATTTTGTCTTCTGGTTTCAGAGCTTCATAGTTCTCTAACATCAGAAATTCATTTCTTGAGGAAGC
AGAACCAGGCCCTCAATGCAATGCTCATTAAAGGATCCAGAGATAAACAGAAAGGAGAATGACAAAATACGAGAGT
CCCTCTCCAGGAAGACCGTGAGCCTGGAGCACCTTCAGCGGGAGTATGCCAGCGTGAAGGAAGAAAATGAAAGGC
TGCAGAAAGAAGGCAGCGAGAAGGAGAGACACAACCAGCAGCTGATCCAGGAGGTCCGCTGCAGCGGCCAGGAGC

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FIGURE 2759B

TGAGCAGGGTGCAGGAGGAGGTGAAGTTGAGGCAGCAGCTGCTCTCACAGAATGACAAGCTATTGCAGTCTCTCC
GAGTGGAGCTGAAGGCGTATGAGAAGCTGGATGAAGAGCACAGGAGACTGAGAGAGGCGTCGGGAGAAGGCTGGA
AGGGGCAGGATCCTTTTCAGGGACCTGCACAGCCTCCTGATGGAGATCCAGGCTCTGCGCTTGCAACTAGAAAGGA
GCATCGAAACCAGCAGCACTCTGCAGAGCAGGCTCAAGGAACAGCTGGCAAGGGGGGCAGAGAAGGCACAGGAAG
GAGCCCTCACTCTGGCTGTCCAAGCCGTGTCCATCCCTGAGGTGCCCTTCAGCCTGACAAACACGATGGTGACA
AATATCCCATGGAAGTGATAATTCATTTGATCTGTTTGATTCCCTCCCAGGCAGTGACACCAAATCAGTTTCAG
AGACTCCTCCACTCTCTGGGAATGACACGGACTCCCTCTCCTGCGACAGTGGCAGTTCGGCAACTAGCACTCCGT
GTGTGTCCCGCTGGTCACTGGCCACCACCTGTGGGCCAGCAAGAATGGCCGCCATGTCTGGGCCTGATTGAGG
ACTATGAGGCCCTGCTCAAACAGATCAGCCAGGGACAGAGGCTCCTTGCTGAAATGGACATTCAAACCCAAGAGG
CTCCCAGCTCCACAAGTCAAGAGCTGGGAACAAAGGTCCACACCCAGCACCCTGAGCAAGTTTGTGAGCAGTG
TGAGCACGGCCAAGCTGACCCTGGAAGAGGCCTACAGGCGGCTGAAGCTTCTCTGGAGAGTCTCACTCCCCGAGG
ATGGCCAGTGCCCCCTTCACTGTGAGCAGATTGGAGAAATGAAGGCAGAGGTCACCAAACACATAAAAAATTGT
TTGAACAAGAAAAGAAGTTGCAAAACACCATGAAGCTTTTGAGCTGAGCAAGCGCCAGGAAAAGTCATCTTTG
ATCAATTGGTCGTAACCCACAAAATCCTTCGGAAGGCCAGAGGAAACCTGGAGCTTAGGCCTGGGGGAGCCCATC
CAGGAACATGCAGTCCCAGCAGACCAGGCTCCTGAGAAGAACTTTAGCCAATAAAGCTTGTGCTTCCCCCACC
AGCTCACGCTGTCTCTTTGTTCCAAGTGTGGTTCCATTTATTGAGGAAGAAAGAGCTGTCTGGCCAAAGGAAAT
CTATTTTTTCCCTTCATGTTTTCTCTCTGAAAGTTGGCTTGAGAGTTGTTGTCAGAAAGGTGCAGGTGCTCCACA
AACGGGTGGTAAAAAGGCCTCGAGCTCTTGGATGTTGTATTTTCAATCAGGGGCAGGCACCGGAGTTGAGGCTGT
GCGCCTTGGTGGGCTTCAGCTCTTCCCCTGGATTTGCTTAGTACTCAGCCAGTGCCACAGTTTGAAGATTCTCAT
TAAATGATTCAATTCATTTACCTTG

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FIGURE 2760

GGTGTGTGCGGAACATGGCGGAGCGCGGCAGGAAGCGGCCGTGCGGCCCGGGTGAACACGGCCAAAGGATTGAGT
GGCGAAAATGGAAGCAACAGAAGAAAGAGGAGAAAAAAAATGGAAGGATCTCAAGCTGATGAAAAAACTGGAGC
GGCAGCGGGGCACAGGAGGAACAGGCAAAGCGCCTGGAAGAGGAGGAGGCAGCGGCAGAGAAGGAGGACCGCGGGC
GGCCCTACACACTGAGCGTAGCCCTGCCGGGCTCCATCCTGGACAATGCTCAGTCGCCGGAGCTTCGCACCTACT
TGGCCGGTCAGATTGCCAGAGCCTGTGCCATCTTCTGTGTGGATGAGATCGTGGTGTGTTGATGAGGAGGGCCAGG
ATGCCAAGACTGTGGAGGGGAATTCACAGGAGTTGGGAAGAAGGGGCAGGCGTGCGTACAGCTGGCCCGGATCC
TGCAGTACCTGGAGTGTCCACAGTACCTGAGGAAGGCGTTCTTCCCAAGCACCAGGATCTACAGTTTGCAGGGC
TCCTGAACCCCCTGGACAGCCCCACCACATGCGTCAGGATGAGGAATCCGAGTTCCGAGAGGGCATCGTGGTGG
ATCGGCCCCACCCGGCCAGGCCACGGCTCCTTTGTCAACTGTGGCATGAAAAAGGAGGTGAAGATTGACAAGAACC
TGGAGCCCGGGCTTCGGGTGACTGTGCGACTGAACCAGCAGCAGCACCAGACTGCAAGACCTACCATGGCAAAG
TGGTATCATCGCAGGACCCTCGCACCAAAGCTGGTCTCTACTGGGGCTACACCGTCCGACTGGCTTCCTGCCTCA
GTGCTGTGTTTGCTGAGGCCCCCTTCCAAGATGGGTATGACCTGACCATCGGGACGTCAGAGCGCGGCTCAGATG
TGGCCTCTGCCAGCTTCCCAACTTCAGGCATGCTCTTGTGGTGTTCGGGGGCTCCAGGGTCTGGAAGCTGGAG
CGGATGCTGACCCCAACCTGGAGGTGGCTGAACCCAGTGTCTCTTTGACCTGTACGTCAATACCTGTCCTGGCC
AGGGTAGCCGTACCATCCGCACGGAGGAAGCCATCCTCATCTCCCTGGCCGCCCTGCAGCCTGGCCTCATCCAGG
CGGGTGCCCGGCACACCTGAAAGTTCTAAGGGGCCGAGGACATCAGTGAAGCAGCAGTGAAACCAGGGGCTCTGC
AGGTCACTTGGGACGGACGCCACCAGACTTGTCTCC

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FIGURE 2761

GGCACGAGGCTGGGTTCCGAGGCCCAAGCCCTTGGCAGTGTTTTGTGAGTGGAAGGGAGGTCACGCTATCGTCCGC
GGCCCCAGCAGCCCTGTGCCCTCGTTGGATCCCGCGACGCGGCTCCTTTAAGAGCCTCGCGGGTCGCCCCGCCGT
AGGTCGCTCCCCGGCCATCGGGCGCTGCGGGCCGGCCTGACCCTGGCGTCGGGCGCGGGGCTGGGTGCGGTCGT
CGAGGGCTGGCGGGCGGGCGGGAGGACGCGGGCGGGCGCTGGGACTGCTGGGCCGGCTGCCCCGTGCTGCCCGT
GGCGGCGGCAGCCGAGTTGCCCCCTGTGCCCGGGGACCCCGCGGGCCCGGGCGAGTTGGCCAAGTACGGGCTGCC
GGGGCTGGCGCAGCTCAAGAGCCGCGAGTCGTACGTGCTGTGCTACGACCCGCGCACCCGCGGCGCGCTCTGGGT
GGTGGAGCAGCTGCGACCCGAGCGTCTCCGCGGCGACGGCGACCGGCGCGAGTGC GACTTCCGCGAGGACGACTC
GGTGCACGCGTACCACCGTGCCACCAACGCCGACTACCGCGGCAGTGGCTTCGACCGCGGTACCTGGCCGCCGC
CGCCAACCACCGCTGGAGCCAGAAGGCCATGGACGACACGTTCTACCTGAGCAAAGTCGCGCCCCAGGTGCCCCA
CCTCAACCAGAATGCCTGGAACAACCTGGAGAAATATAGCCGCAGCTTGACCCGCAGCTACCAAACGTCTATGT
CTGCACAGGGCCACTCTTCCTGCCCAGGACAGAGGCTGATGGGAAATCCTACGTAAAGTACCAGGTCATCGGCAA
GAACCACGTGGCAGTGCCCAACACACTTCTTCAAGGTGCTGATCCTGGAGGCAGCAGGTGGGCAAATTGAGCTCCG
CACCTACGTGATGCCCAACGCACCTGTGGATGAGGCCATCCCACTGGAGCGCTTCCTGGTGCCCATCGAGAGCAT
TGAGCGGGCTTCGGGGCTGCTCTTTGTGCCAAACATCCTGGCGCGGGCAGGCAGCCTCAAGGCCATCACGGCGGG
CAGTAAGTGAGGGTGGAGCCCAGTGAGACTGTGGGTGTGTGCAGGCCGGGGAGTATTAAAGGTGGTGATTTTGG
AAAAAAA

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FIGURE 2762

MRALRAGLTLASGAGLGAVVEGWRRRRREDARAALGLLGRLPVLPVAAAAELPPVPGGPRGPGELAKYGLPGLAQL
KSRESYVLCYDPRTRGALWVVEQLRPERLRGDGDRRECDFREDDSVHAYHRATNADYRGSGFDRGHLAAAAANHRW
SQKAMDDTFYLSKVAPQVPHLNQNAWNNLEKYSRSLTRS YQNVYVCTGPLFLPRTEADGKS YVKYQVIGKNHVAV
PTHFFKVLILEAAGGQIELRTYVMPNAPVDEAIPLERFLVPIESIERASGLLFVFNILARAGSLKAITAGSK

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FIGURE 2763

GGCACGAGGCCGGGCGGAGGCGATGGCGCCCTGGGCGCTCCTCAGCCCTGGGGTCCTGGTGCGGACCGGGCACAC
CGTGCTGACCTGGGGAATCACGCTGGTGCTCTTCCTGCACGATACCGAGCTGCGGCAATGGGAGGAGCAGGGGGA
GCTGCTCCTGCCCCCTACCTTCCTGCTCCTGGTGCTGGGCTCCCTGCTGCTCTACCTCGCTGTGTCACTCATGGA
CCCTGGCTACGTGAATGTGCAGCCCCAGCCTCAGGAGGAGCTCAAAGAGGAGCAGACAGCCATGGTTTCCTCCAGC
CATCCCTCTTCGGCGCTGCAGATACTGCCTGGTGCTGCAGCCCTGAGGGCTCGGCACTGCCGTGAGTGCCGCCG
TTGCGTCCGCCGCTACGACCACCACTGCCCCTGGATGGAGAAGTGTGTGGGAGAGCGCAACCACCCACTCTTTGT
GGTCTACCTGGCGCTGCAGCTGGTGGTGCTTCTGTGGGGCCTGTACCTGGCATGGTCAGGCCTCCGGTTCTTCCA
GCCCTGGGGTCTGTGGTTGCGGTCCAGCGGGCTCCTGTTGCCCACCTTCCTGCTGCTGTCCCTCTTCTCGTTGGT
GGCCAGCCTGCTCCTCGTCTCGCACCTCTACCTGGTGGCCAGCAACACCACCACCTGGGAATTCATCTCCTCACA
CCGCATCGCCTATCTCCGCCAGCGCCCCAGCAACCCCTTCGACCGAGGCCTGACCCGCAACCTGGCCCCACTTCTT
CTGTGGATGGCCCTCAGGGTCCTGGGAGACCCTCTGGGCTGAGGAGGAGGAAGAGGGCAGCAGCCCAGCTGTTTA
GGGTTGCTGGAGGCCGGGCTACCGTCTTGTGCCTGAAAACCACGGGGCCTGTCCCCAGCTGGGGTGAGCGCTCAG
AGGGCCTGGGGCCCTCACTCCTGCCACGCCTCCAGACCCCAAGACGGAGCTTCAAGTCAGACAGATCCCTGCC
TTGGTGGGCAGTTCTGCCTTCCAAGGAAGAAGGGGAAGAAAAGGACCTGTGGGTGGCTCAGGCCCAAGCAGACCC
CGGGCTCCACCCCAAGCCCCGCCAGGCTGCTGCCAGTGACACTTTTACAAATTTAATATAAAGCAAGTCCAGTC
TAAAAAGACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2764

MAPWALLSPGVLVRTGHTVLTWGITLVLF LHDTELQWEEQGELLPLTFLLLVLGSLLLYLAVSLMDPGYVNVO
PQPQEELKEEQTAMVPPAIPLRRCRYCLVLQPLRARHCRECRRCVRRYDHHCPWMENCVGERNHPLFVVYLALQL
VLLWGLYLAWSGLRFFQPWGLWLRSSGLLFATFLLLSLFSLVASLLLVSHLYLVASNTTTWEFISSHRIAYLRQ
RPSNPFDRGLTRNLAHFFCGWPSGSWETLWAEEEEEEESPAV

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FIGURE 2765

CATGTCGGCGCĈGGCGGCCAAAGTCAGTAAAAAGGAGCTCAACTCCAACCACGACGGGGCCGACGAGACCTCAGA
AAAAGAACAGCAAGAAGCGATTGAACACATTGATGAAGTACAAAATGAAATAGACAGACTTAATGAACAAGCCAG
TGAGGAGATTTTGAAAGTAGAACAGAAATATAACAACTCCGCCAACCATTTTTTCAGAAGAGGTCAGAATTGAT
CGCCAAAATCCCAAATTTTTGGGTAAACAACATTTGTCAACCATCCACAAGTGTCTGCACTGCTTGGGGAGGAAGA
TGAAGAGGCACTGCATTATTTGACCAGAGTTGAAGTGACAGAATTTGAAGATATTAAATCAGGTTACAGAATAGA
TTTTTATTTTGATGAAAATCCTTACTTTGAAAATAAAGTTCTCTCCAAAGAATTTTCATCTGAATGAGAGTGGTGA
TCCATCTTTCGAAGTCCACC GAAATCAAATGGAATCTGGAAGGATTTGACGAAACGTTTCGAGTCAAACGCAGAA
TAAAGCCAGCAGGAAGAGGCAGCATGAGGAACCAGAGAGCTTCTTTACCTGGTTTACTGACCATTCTGATGCAGG
TGCTGATGAGTTAGGAGAGGTCATCAAAGATGATATTTGGCCAAACCCATTACAGTACTACTTGGTTCCCGATAT
GGATGATGAAGAAGGAGAAGGAGAAGAAGATGATGATGATGATGAAGAGGAGGAAGGATTAGAAGATATTGACGA
AGAAGGGGATGAGGATGAAGGTGAAGAAGATGAAGATGATGATGAAGGGGAGGAAGGAGAGGAGGATGAAGGAGA
AGATGACTAAATAGAACACTGATGGATTCCAACCTTCCTTTTTTTAAATTTTCTCCAGTCCCTGGGAGCAAGTTG
CAGTCTTTTTTTTTTTTTTTTTTTTTTTTTTCCCTCTTGTGCTCAGTCGCCCTGTTCTTGAGGTCTCTTTCTCTAC
TCCATGGTTCTCAATTTATTTGGGGGAAATACCTTGAGCAGAATACAATGGGAAAAGAGTCTCTACCCCTTTCT
GTTCGAAGTTCAATTTTTATCCCTTCCTGTCTGAACAAAACCTGTATGGAATCAACACCACCGAGCTCTGTGGGAA
AAAAGAAAACCTGCTCCCTTCGCTCTGCTGGAAGCTGGAGGGTGCTAGGCCCTGTGTAGTAGTGATAGAAATT
CTAGCTTTTTTCTCTCTTCTCTGTATATTGGGCTCAGAGAGTACACTGTGTCTCTATGTGAATATGGACAGTTA
GCATTTACCAACATGTATCTGTCTACTTTCTCTGTTTAAAAAAGAAAAAAAACTTAAAAAATGGGGTTATA
GAAGGTCAGCAAAGGGTGGGTTTGAGATGTTGGGTGGGTAAAGTGGGCATTTTGACAACATGGCTTCTCCTTTG
GCATGTTTAATTGTGATATTTGACAGACATCCTTGAGTTTAAGATGACACTTTTAAAAATAAATTCTCTCCTAAT
GATGACTTGAGCCCTGCCACTCAATGGGAGAATCAGCAGAACCTGTAGGATCTTATTTGGAATTGACATTCTCTA
TTGTAATTTTGTTCTGTTTATTTTTTAAATTTTCTTTTTGTTTCACCTGGAAAGGAAAGATGATGCTCAGTTTTAA
ACGTTAAAAGTGTACAAGTTGCTTTGTTACAATAAACTAAATGTGTACACAAAGGATTTGATGCTTTTCTCTCA
GCATAGGTATGCCTTACTATGACCTTCCAAGTTTGACTTGTATAACATCACTGTCAAACCTTGTCAACCTAACTTC
GTATTTTTTGTATACGCACCTTTGAGGATGACCTCAGGGCTATGTGGATTGAGTAATGGGATTTGAATCAATGTAT
TAATATCTCCATAGCTGGGAAACGTGGGTTCAATTTGCCATTGGTTTCTGAAAGTATTCACATCATTTGGGATAC
CAGATAGCTCAATACTCTCTGAGTACATTGTGCCCTTGATTTTTATCTCCAAGTGGCAGTTTTTAAATTTGGCCT
TTTACCTGGATATAAATTAATTGTGCCTGCCACCACCATCCAACAGACCTGGTGCTCTAATGCCAAGTTATACAC
GGGACAGTTGCTGGCATGTCTTCATTGGCTATATAAAATGTGGCCAAGAAGATAGGCTCTCAGTAAGAAGTCTGA
TGGTGAGCAGTAACCTGTCCCTGCTTTCTGGTATAAAGCTCTCAAATGTGACCATGTGAATCTGGGTGGGATAATG
GACTCAGCTCTGTCTGCTCAATGCCATTGTGCAGAGAAGCACCCTAATGCATAAGCTTTTTAATGCTGTAAAATA
TAGTCGCTGAAATTAAATGCCACTTTTTTCAGAGGTGAATTAATGGACAGTCTGGTGAACCTTCAAAGCTTTTTGA
TGTATAAACTTGATAAATGGAACATTTCCATCAATAGGCAAAAGTGTAAACACCTATCTAGATGGATAGTATGT
AATTTCTGCACAGGTCTCTGTTTAGTAAATACATCACTGTATACCGATCAGGAATCTTGCTCCAATAAAGGAACA
TAAAGATTT

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FIGURE 2766

GGCGGCGTAGGGGCGGAGGTTCGCGCCTGAGTGCGTCCGCACGAGAGGGCGGAACCGTCTCCATGGCAACCCGCGC
GCAGCCGGGGCCACTCAGCCAGGCGGGAAGCGCTGGTGTTCGCGCGCTGGCGACAGTCGGGGTTGCGAGCGGCCC
GGGGCCGGGGCGGCCAGGGCCGCTGCAGGACGAGACCCTGGGTGTGGCGTCCGTGCCCTCGCAGTGGAGGGCCGT
CCAGGGCATCCGCTGGGAGACGAAAAGTTGCCAGACGGCCAGCATTGCCACTGCCAGTGCATCCGCCCAGGCCAG
GAATCATGTGGACGCCAGGTGCAGACGGAGGCCCCCGTGCTGTGCAGGTGCAGCCCCCGTCCAGTATGACAT
ACCCAGGCTCGCAGCCTTTCTTCGGAGAGTGGAGGCCATGGTCATCCGAGAGCTGAACAAGAATTGGCAGAGCCA
CGCGTTTGATGGCTTCGAGGTGAAGTGGACCGAGCAGCAGCAGATGGTGTCTTGTCTGTATACCCCTGGGCTACCC
GCCAGCCCAAGCGCAGGGTCTGCATGTGACCAGCATCTCCTGGAACCTCACTGGCTCTGTGGTGGCCTGTGCCTA
CGGCCGGCTGGACCATGGGGACTGGAGCACGCTTAAGTCCTTCGTGTGTGCCTGGAACCTGGACCGGCGAGACCT
GCGTCCCCAGCAGCCGTGCGCCGTGGTGGAGGTCCCCAGCGCTGTCCTGTGTCTGGCCTTCCACCCACGCAGCC
CTCCACGTTCGAGGAGGGCTGTACAGTGGTGGGTGTTGGTGTGGGACCTGAGCCGTCTTGAGGACCCGCTGCT
GTGGCGCACAGGCCTGACGGATGACACCCACACAGACCCTGTGTCCCAGGTGGTGTGGCTGCCCCGAGCCTGGGCA
CAGCCACCGCTTCAGGTGCTGAGTGTGGCCACCGACGGGAAGGTGCTACTCTGGCAGGGCATCGGGGTAGGCCA
GCTGCAGCTCACAGAGGGCTTCGCCCTGGTCATGCAGCAGCTGCCACGGAGCACCAGCTCAAGAAGCATCCCCG
CGGGGAGACCGAGGTGGGCGCCACGGCAGTGGCCTTCTCCAGCTTTGACCCTAGGCTGTTTATTCTGGGCACGGA
AGGCGGCTTCCCGCTCAAGTGTTCCTGGCAGCTGGAGAGGCAGCCCTCACGCGGATGCCAGCTCCGTGCCCCCT
GCGGGCCCCAGCACAGTTTACCTTCTCCCCCACGGCGGTCCCATCTACTCTGTGAGCTGTTCCCCCTTCCACAG
GAATCTCTTCTGAGCGCTGGGACTGACGGGCATGTCCACCTGTACTCCATGCTGCAGGCCCCCTCCCTTGACTTC
GCTGCAGCTCTCCCTCAAGTATCTGTTTGCTGTGCGCTGGTCCCCAGTGCAGGCCCTTGGTTTTTGCAGCTGCCTC
TGGGAAAGGTGACGTGCAGCTGTTTGATCTCCAGAAAAGCTCCAGAAAACCCACAGTTTTGATCAAGCAAACCCA
GGATGAAAGCCCTGTCTACTGTCTGGAGTTCAACAGCCAGCAGACTCAGCTCTTGGCTGCGGGCGATGCCAGGG
CACAGTGAAGGTGTGGCAGCTGAGCACAGAGTTACGGAACAAGGGCCCCGGGAAGCTGAGGACCTGGACTGCCT
GGCAGCAGAGGTGGCGGCCTGAGGGGTCCCGGGAGGCGGGTGCAAGCCTTCGCTGTGCCGAGCCTTGTGTTTCTG
ACGCAAGCCAAATGAAGAAAAGCAAAGCTT

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FIGURE 2767

ATGCTGCAGGAGTGGCTGGCGGCTGTGGGCGATGACTATGCTGCTGTGGTCTGGAGGCCTGAGGGCGAGCCCAGG
 TTCTACCCAGATGAAGAGGGTCCCAAGCACTGGACCAAAGAAAGGCACCAGTTTCTGATGGAGCTGAAGCAGGAA
 GCCCTCACCTTTGCCAGGAAC TGGGGGGCCGACTATATCCTGTTTGCAGACACAGACAACATTCTGACCAACAAT
 CAGACTCTGCGGCTTCTCATGGGGCAGGGGCTTCCAGTGGTGGCCCCAATGCTGGACTCCCAGACCTACTACTCC
 AACTTCTGGTGTGGGATCACCCCCCAGGGCTACTACCGCCGCACAGCCGAGTACTTCCCCACCAAGAACC GCCAG
 CGCCGGGGCTGCTTCCGTGTCCCCATGGTCCACTCCACCTTCCTTGCATCCCTGCGGGCTGAAGGGGCAGACCAG
 CTTGCTTTTACCCGCCACATCCCAACTACACTTGGCCTTTCGACGACATCATCGTCTTCGCCTATGCCTGCCAG
 GCTGCTGGGGTCTCCGTCCACGTGTGCAATGAGCACCGTTATGGGTACATGAATGTGCCGGTGAAATCCCACCAG
 GGGCTGGAAGACGAGAGGGTCAACTTCATCCACCTGATCTTGGAAGCACTAGTGGACGGCCCCCGCATGCAGGCC
 TCAGCTCATGTGACTCGGCCCTCTAAGAGGGCCAGCAAGATAGGGTTTGACGAGGTCTTTGTCATCAGCCTGGCT
 CGCAGGCCTGACCGTCGGGAACGCATGCTCGCCTCGCTCTGGGAGATGGAGATCTCTGGGAGGGTGGTGGACGCT
 GTGGATGCTGGATGGCTCAACAGCAGTGCCATCAGGAACCTCGGCGTAGACCTGCTCCCGGGCTACCAGGACCTT
 TACTCGGGCCGCACTCTGACCAAGGGCGAGGTGGGCTGCTTCCTCAGCCATTACTCCATCTGGGAAGAGGTGGTT
 GCCAGGGGCTGGCCCGGGTCTTGGTGTGGAGGATGACGTGCGCTTTGAGAGCAACTTCAGGGGGCGGGCTGGAG
 CGGCTGATGGAGGATGTGGAGGCAGAGAACTGTCTTGGGACCTGATCTACCTTGGACGGAACAGGTGAACCTT
 GAGAAGGAGACGGCCGTGGAGGGGCTGCCGGGCCTGGTGGTGGCTGGGTACTCCTACTGGACGCTGGCCTATGCC
 CTGCGTCTGGCGGGTGCCCGCAAGCTGCTGGCCTCACAGCCTCTGCGCCGCATGCTGCCCCGTTGGACGAGTTCTTG
 CCCATCATGTTTCGACCAGCACCCCAACGAGCAGTACAAGGCACACTTCTGGCCACGGGACCTGGTGGCCTTCTCC
 GCCAGCCCCCTGCTCGCTGCCCTACCCACTATGCCGGGGACGCCGAGTGGCTCAGTGACACGGAGACATCCTCT
 CCATGGGATGATGACAGCGGCCGCTCATCAGCTGGAGCGGCTCCCAAAAGACCCTGCGCAGCCCCCGCCTGGAC
 CTGACTGGCAGCAGCGGGCACAGCCTCCAACCCAGCCCCGAGATGAGCTCTTAG

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FIGURE 2768

MLQEWLA AVGDDYAAVVWRPEGEPRFYPDEEGPKHWTKERHQFLMELKQEALTFARNWGADYILFADTDNILTNN
QTLRLLMGQGLPVVAPMLDSQTYYSNFWCGITPQGYRRTAEYFPTKNRQRRGCFRVPMVHSTFLASLRAEGADQ
LAFYPPHPNYTWPFDDIIVFAYACQAAGVSVHVCNEHRYGYMNPVKSHQGLEDERVNF IHLILEALVDGPRMQA
SAHVTRPSKRPSKIGFDEVFVISLARRPDRRERMLASLWEMEISGRVVDAGWLNSSAIRNLGVDLLPGYQDP
YSGRTLTKGEVGCFLSHYSIWEEVVARGLARVLVFEDDVRFESNFRGLERLMEDVEAEKLSWDLIYLGRKQVNP
EKETAVEGLPGLVVAGYSYWTLAYALRLAGARKLLASQPLRRMLPVDEFLLPIMFDQHPNEQYKAHFWPRDLVAFS
AQPLLAAPTHYAGDAEWLSDTETSSPWDDDSGR LISWGSQKTLRSPRLDLTGSSGHS LQPQPRDEL

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FIGURE 2769

GCGAGCTCGGCTTCCTCAACATGGCTGCGCCCTTGTCAGTGGAGGTGGAGTTCGGAGGTGGTGCGGAGCTCCTGT
TTGACGGTATTAAGAAACATCGAGTCACTTTGCCTGGACAGGAGGAACCTGGGACATCCGGAACCTGCTCATCT
GGATCAAGAAGAATTTGCTAAAAGAGCGGCCAGAGTTGTTTCATCCAGGGAGACAGCGTGCGGCCAGGAATTTCTGG
TGCTGATTAACGATGCCGACTGGGAGCTACTGGGTGAGCTGGACTACCAGCTTCAGGACCAGGACAGCGTCTCTCT
TCATCTCCACTCTGCACGGCGGCTGAGGGGCCCTTCTCTGGGCCTGGGCACCCCTTAGAGGGGAGAACGAAGCAATC
AGACATCCCCCTTGGGGCCCTGCTTCCAGGTCTCCCTGTCCCCCTTGCCTGCCTTCTTCCCTGCTCTGTCCCCTAAG
CTCCCTCCAGGCAGGGAAAAGAGGCCAGGTGCTAAAAATGAGCCCTTTCTCAAGCACGTGAGCAGCGGAAGGCAGA
CAGGCGCCAGAGCCCAGCACTCCCTTTTCCAGCAGCTGTGGTGGGGGAGGGTTCCCCCTCCAGTTTGTCAAGAGTT
GAAGGAGGCTCTGTGGCCAGGTGACCTGGCTGCCCTCCACTCCTTGTACCTCAGTCTAAACATGGAGTGGCCGCT
GACAAGGCGCTCCAGCCCCAGAGCCAGCGTCTTCATGGGGAAGATGAATGGACCTGAGTAGCTGAAGGAAGGCCC
CTCCCTACCCAAAGACTGGAGGCTTCTCAGCCTCAATTTCCCTGTCTGTACAGCTGAGGGCTCTGCCTGTCCCC
ACTGCTATCAGTATGGAACCCAGCTGGGGTCCCCATTTGAGTGCCGACTCCCCCACCAGCCAGCAGCTGCTCCT
CCAGCCACACCCCTCCTGCTCCCCCACCCTAGCCCTTGACCCTGGCTGGCCTGCCCCGCTCCACAGGCCACCA
GATGGGCTCCTGAGACCCCTCCCCAGGCTGCTTACAGCTCATTCTGCTGGGGGTAGAGATGAGGGGAGGGAGTAAG
TTAAACCTTGGACTAGCAAGTAGAAGCCTGGGGGGATGCGTGTGCCTCAGTTTCCTCCTCCACAAGTGAATATAG
TGGCTGAAAACCTGGGGAGATACTTGATGGCGCGAATGTCCGTTTTCTCTCCCTTCCCACCTCCTGCAGGAAGCAG
GACGGGGCAGGCAGCACCTGGTAGGCACAGTGCTTTGCCCTCCTCCCCCTCCCTTCTGGAAGTCTTGGGGCCTC
AGTGCTTGCAACAGCCGGCCTTGGGCAAATAAAAGACTAGGTTGTTTACT

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FIGURE 2770

MAAPLSVEVEFGGGAELLFDGIKKHRVTLPGQEEPWDIRNLLIWIKKNLLKERPELFIQGDSVRPGILVLINDAD
WELLGELDYQLQDQDSVLFISTLHGG

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FIGURE 2771

CAGCAGCAGCAGCAGCTCCAGCAACAGCAGCAGCAGCTCCAGCAGTTACAGCAGCAGCAGCTCCAGCAGCAGCAA
TTGCAGCAGCAGCAGTTACTGCAGCTCCAGCAGCTGCTCCAGCAGTCCCCACCACAGGCCCGTTGCCCATGGCT
GTCAGCCGGGGGCTCCCCCGCAGCAGCCACAGCAGCCGCTTCTGAATCTCCAGGGCACCAACTCAGCCTCCCTC
CTCAACGGCTCCATGCTGCAGAGAGCTTTGCTTTTACAGCAGTTGCAAGGACTGGACCAGTTTGCAATGCCACCA
GCCACGTATGACACTGCCGGTCTCACCATGCCCACAGCAACACTGGGTAACCTCCGAGGCTATGGCATGGCATCC
CCAGGCCTCGCAGCCCCAGCCTCACACCCCCACAACCTGGCCACTCCAAATTTGCAACAGTTCTTTCCCCAGGCC
ACTCGCCAGTCTTTGCTGGGACCTCCTCCTGTTGGGGTCCCCATGAACCTTTCCAGTTCAACCTTTCAGGACGG
AACCCCCAGAAACAGGCCCGGACCTCCTCCTCTACCACCCCCAATCGAAAGGATTCTTCTTCTCAGACAATGCCT
GTGGAAGACAAGTCAGACCCCCAGAGGGTCTGAGGAAGCCGAGAGCCCCGGATGGACACACCAGAAGACCA
GATTTACCGCCCTGCCCAGAGGACATCGCCAAGGAAAAACGCACTCCAGCACCTGAGCCTGAGCCTTGTGAGGCG
TCCGAGCTGCCAGCAAAGAGATTGAGGAGCTCAGAAGAGCCACAGAGAAGGAACCTCCAGGGCAGTTACAGGTG
AAGGCCCAGCCGAGGCCCGGATGACAGTACCGAAACAGACACAGACACCAGACCTGCTGCCTGAGGCCCTGGAA
GCCAAGTGCTGCCACGATTCCAGCCACGGGTCTGCAGGTCCAGGCCAGGTGCAGTCACAGACTCAGCCGCGG
ATACCATCCACAGACACCCAGGTGCAGCCAAAGCTGCAGAAGCAGGCGCAAACACAGACCTCTCCAGAGCACTTA
GTGCTGCAACAGAAGCAGGTGCAGCCACAGCTGCAGCAGGAGGCAGAGCCACAGAAGCAGGTGCAGCCACAGGTA
CAGCCACAGGCACATTCACAGGGCCCAAGGCAGGTGCAGCTGCAGCAGGAGGCAGAGCCGCTGAAGCAGGTGCAG
CCACAGGTGCAGCCCCAGGCACATTCACAGCCCCCAAGGCAGGTGCAGCTGCAGCTGCAGAAGCAGGTCCAGACA
CAGACATATCCACAGGTCCACACACAGGCACAGCCAAGCGTCCAGCCACAGGAGCATCCTCCAGCGCAGGTGTCA
GTACAGCCACCAGAGCAGACCATGAGCAGCCTCACACCCAGCCGAGGTGTCTGTTGCTGGCTCCAGAGCAAACA
CCAGTTGTGGTTCTGTCTGCGGGCTGGAGATGCCACCTGATGCAGTAGAAGCTGGTGGAGGCATGGAAAAGACC
TTGCCAGAGCCTGTGGGCACCAAGTCAGCATGGAAGAGATTGAGAATGAGTCGGCCTGTGGCCTAGATGTGGGA
GAATGTGAAAACAGAGCGAGAGAGATGCCAGGGGTATGGGGCGCCGGGGGCTCCCTGAAGGTCACCATTCTGCAG
AGCAGTGACAGCCGGGCCCTTTAGCACTGTACCCCTGACACCTGTCCCCCGCCCCAGTGACTCCGTCTCCTCCACC
CCTGCGGCTACCAGCACTCCCTCTAAGCAGGCCCTCCAGTTCTTCTGCTACATCTGCAAGGCCAGCTGCTCCAGC
CAGCAGGAGTTCCAGGACCACATGTCGGAGCCTCAGCACCAGCAGCGGCTAGGGGAGATCCAGCACATGAGCCAA
GCTGCTCCTGTCTCCTGCTGCCCGTGCCCCGGGACGTCTTGAGACAGAGGATGAGGAGCCTCCACCAAGGCGC
TGGTGCAACACCTGCCAGCTCTACTACATGGGGGACCTGATCCAACACCGCAGGACACAGGACCACAAGATTGCC
AAACAATCCTTGCGACCCCTTCTGCACCGTTTGCAACCGCTACTTCAAAACCCCTCGCAAGTTTGTGGAGCACGTG
AAGTCCCAGGGGCATAAGGACAAAGCCAAGGAGCTGAAGTCGCTTGAGAAAGAAATTGCTGGCCAAGATGAGGAC
CACTTCATTACAGTGGACGCTGTGGGTGCTTCGAGGGTGATGAAGAAGAGGAAGAGGATGATGAGGATGAAGAA
GAGATCGAGGTTGAGGAGGAACCTCTGCAAGCAGGTGAGGTCCAGAGATATATCCAGAGAGGAGTGGAAGGGCTCG
GAGACCTACAGCCCCAATACTGCATATGGTGTGGACTTCCTGGTGCCCGTGATGGGCTATATCTGCCGCATCTGC
CACAAGTTCTATCACAGCAACTCAGGGGCACAGCTCTCCCACTGCAAGTCCCTGGGCCACTTTGAGAACCTGCAG
AAATACAAGGCGGCCAAGAACCCAGCCCCACACCCGACCTGTGAGCCGCCGGTGCGCAATCAACGCCCGGAAC
GCTTTGACAGCCCTGTTACCTCCAGCGGCCGCCACCCCTCCAGCCCAACACCCAGGACAAAACACCCAGCAAG
GTGACGGCTCGACCCCTCCAGCCCCCACTACCTCGGCGCTCAACCCGCTCAAAACCTGATAGAGGGACCTCCCT
GTCCCTGGCCTGCCTGGGTCCAGATCTGCTAATGCTTTTTAGGAGTCTGCCTGGAACTTTGACATGGTTTCATGT
TTTTACTCAAAATCCAATAAAACAAGGTAGTTTGGCTG

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FIGURE 2772

GGCACGAGGGGCGGGCGTTTCGAACTTGGGCGCCGGGCACACGCCAGTCCCGAGAGCGCTGAGGGTTCCCTTAG
CGTCGCCCTCACCCCGGCCAACCCGCGGGGCGCCAGAGTCTTGGCCCTTTAAACGCCGCGCTGCCCTCGGCGTCT
TCGTTTCGCGCGCCCCGCCGCGGCGCCGGCGGAGCGAACATGGACCCGGCTGCGCGGGTGGTGCGGGCGCTGTGG
CCTGGTGGGTGCGCCTTGGCCTGGAGGCTGGGAGGCCGCCCCAGCCGCTGCTACCCACGCAGAGCCGGGCTGGC
TTCGCGGGGGCGGGCGGGCGGCCGAGCCCCGTGGCTGCAGCTCGTAAGGGGAGCCCGCGGCTGCTGGGAGCTGCG
GCGCTGGCCCTGGGGGAGCCCTGGGGCTGTACCACACGGCGCGGTGGCACCTGCGCGCCCAGGACCTCCACGCA
GAGCGCTCAGCCGCGCAGCTCTCCCTGTCCAGCCGCTGCAGCTGACCCTGTACCAGTACAAGACGTGTCCCTTC
TGCAGCAAGGTCCGAGCCTTCCTCGACTTCCATGCCCTGCCCTACCAGGTGGTGGAGGTGAACCCTGTGCGCAGG
GCTGAGATCAAGTTCTCCTCCTACAGAAAGGTGCCCATCCTGGTGGCCCAGGAAGGAGAAAGCTCGCAACAATA
AATGACTCCTCTGTTCATCATCAGCGCCCTCAAGACCTACCTGGTGTGCGGGGAGCCCTTGAAGAGATCATCACC
TACTACCCAGCCATGAAGGCTGTGAACGAGCAGGGCAAGGAGGTGACCGAGTTCGGCAATAAGTACTGGCTCATG
CTCAACGAGAAGGAGGCCAGCAAGTGTATGGTGGGAAGGAGGCCAGGACGGAGGAGATGAAGTGGCGGCAGTGG
GCGGACGACTGGCTGGTGCACCTGATCTCCCCAATGTGTACCGCACGCCACCAGGCTCTGGCGTCCCTTGAC
TACATTGTCCGCGAGGGCAAGTTCGGAGCCGTGGAGGGTGCCGTGGCCAAGTACATGGGTGCAGCGGCCATGTAC
CTCATCAGCAAGCGACTCAAGAGCAGGCACCGCCTCCAGGACAACGTGCGCGAGGACCTCTATGAGGCTGCTGAC
AAGTGGGTGGCTGCTGTGGGCAAGGACCGGCCCTTCATGGGGGGCCAGAAGCCGAATCTCGCTGATTTGGCGGTG
TATGGCGTGCTGCGTGTGATGGAGGGGCTGGATGCATTGATGACCTGATGCAGCACACGCACATCCAGCCCTGG
TACCTGCGGGTGGAGAGGGCCATCACCGAGGCCTCCCCAGCGCACATGAATGTCCCCGCGCAGAGCAGAGGGAAGG
CAGCGGAAGACGCCAGCTGCCAGGGCCTGGGGCCACTGGGCCAGCGCCTGGCGATACTGGTTGGGGGCAGGATCA
TTCTGCCCCCTTGTCACGCACCCCCACCAGCCCTCTCGCTTCTAACACAGGGGCACCTGCTGGGGCTCAGGGATGT
TAGGGACGAGTTCCAGCCCTGCCACTGCCCTGGGGCGACCCCTCCCTGTCCCTGCCCTCCCTGCTCTGCCGCCCT
CTTCCTGGACCCCTCAGTGGCTGTCCCATGGCTACATCCTGTGGGTGGGGGCCCTCGACAGGACAGCAGGACGGTT
TGTTTTTCAGTGAATCCCATCCCTGGGTTCCCTGGTTCCCACTCTTCCCAAGCCTCCCGGGACTGGGACATGTT
TGCAATAAAGGAAAGGTTTGTGGCGCCTGTTCATGGCAGGCATCTCATGGAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2773

MDPAARVVRLWPGGCALAWRLGGRPQPLLPTQSRAGFAGAAGGPPVAAARKGSPRLLGAAALALGGALGLYHT
ARWHLRAQDLHAERSAAQLSLSSRLQLTLYQYKTCPFCSKVRAFLDFHALPYQVVEVNPVRRAEIKFSSYRKVPI
LVAQEGESSQQLNDSSVVISALKTYLVSGQPLEEIIITYYPAMKAVNEQGKEVTEFGNKYWLMLNEKEAQQVYGGK
EARTEEMKWRQWADDWLVHLISPNVYRTPTEALASFDYIVREGKFGAVEGAVAKYMGAAAMYLISKRLKSRHRLQ
DNVREDLYEAADKWVAAVGKDRPFMGGQKPNLADLAVYGVLRVMEGLDAFDDLMQHITHIQPWYLRVERAITEASP
AH

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FIGURE 2774

CCCAGCCCTGGAGACAGCAGCCCCTAGACTACTGAGGGACAGCGACAGCATGAAGGCTCCGGGTCTGGCTCGTGCT
CATCATCCTGTGCTCCGTGGTCTTCTCTGCGCTCTACATCCTCCTGTGCTGCTGGGCCGGCCTGCCCTCTGCCT
GGCCACCTGCCTGGACCACCACTTCCCCACAGGCTCCAGGCCCACTGTGCCGGGACCCCTGCACTTCAGTGGATA
TAGCAGTGTGCCAGATGGGAAGCCGCTGGTCCGCGAGCCCTGCCGCAGCTGTGCCGTGGTGTCCAGCTCCGGCCA
AATGCTGGGCTCAGGCCTGGGTGCTGAGATCGACAGTGCCGAGTGCGTGTTCGCGATGAACCAGGCGCCACCGT
GGGCTTTGAGGCGGATGTGGGCCAGCGCAGCACCCCTGCGTGTGCTCTCACACACAAGCGTGCCGCTGCTGCTGCG
CAACTATTCACACTACTTCCAGAAGGCCCCGAGACACGCTCTACATGGTGTGGGGCCAGGGCAGGCACATGGACCG
GGTGCTCGGCGGCCGCACCTACCGCACGCTGCTGCAGCTCACCAGGATGTACCCCGGCCCTGCAGGTGTACACCTT
CACGGAGCGCATGATGGCCTACTGCGACCAGATCTTCCAGGACGAGACGGGCAAGAACCAGGAGGCAGTCGGGCTC
CTTCCTCAGCACCGGCTGGTTACCATGATCCTCGCGCTGGAGCTGTGTGAGGAGATCGTGGTCTATGGGATGGT
CAGCGACAGCTACTGCAGGGAGAAGAGCCACCCCTCAGTGCCTTACCCTACTTTGAGAAGGGCCGGCTAGATGA
GTGTCAGATGTACCTGGCACACGAGCAGGCGCCCCGAAGCGCCACCGCTTCATCACTGAGAAGGCGGTCTTCTC
CCGCTGGGCCAAGAAGAGGCCCATCGTGTTCGCCCATCCGTCTCGGAGGACTGAGTAGCTTCCGTGCTCCTGCCA
GTCGCCATGCCGTTGCGAGGCCTCCGGGATGTCCCATCCCAAGCCATCACACTCCACAAAAACATTTAATTTATG
GATCCTGCCTCCTGCCACGTGCTGGGTGGACCTAAGGTTCCCTTCCACTCCCTGAGTAATTCACGGCATTGGGG
GCTCACCCACCTCCAGGTCTGTCAAGTGGCCTTTGTCCC

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FIGURE 2775

GCGCGGCATAACGACCCAGGTGCGGGCGCGGGCGGGGCTTGAGCGCGTGGCCGGTGCCGCAGGAGCCGAGCATGGA
GTACCAGGATGCCGTGCGCATGCTCAATACCCTGCAGACCAATGCCGGCTACCTGGAGCAGGTGAAGCGCCAGCG
GGGTGACCCTCAGACACAGTTGGAAGCCATGGAAGTGTACCTGGCACGGAGTGGGCTGCAGGTGGAGGACTTGGA
CCGGCTGAACATCATCCACGTCACCTGGGACGAAGGGGAAGGGCTCCACCTGTGCCTTCACGGAATGTATCCTCCG
AAGCTATGGCCTGAAGACGGGATTCTTTAGCTCTCCCCACCTGGTGCAGGTTCTGGGAGCGGATCCGCATCAATGG
GCAGCCCATCAGTCTGAGCTCTTACCAAGTACTTCTGGCGCCTCTACCACCGGCTGGAGGAGACCAAGGATGG
CAGCTGTGTCTCCATGCCCCCTACTTCCGCTTCTTGACACTCATGGCCTTCCACGTCTTCTCCAAGAGAAGGT
GGACCTGGCAGTGGTGGAGGTGGGCATTGGCGGGGCTTATGACTGCACCAACATCATCAGGAAGCCTGTGGTGTG
CGGAGTCTCCTCTCTTGGCATCGACCACACCAGCCTCTGGGGGATACGGTGGAGAAGATCGCATGGCAGAAAGG
GGGCATCTTTAAGCAAGGTGTCCCTGCCTTCACTGTGCTCCAACCTGAAGGTCCCTGGCAGTGTGAGGGACCG
AGCCCAGCAGATCTCATGTCTCTATACCTGTGTCCGATGCTGGAGGCCCTCGAGGAAGGGGGGCGCCGCTGAC
CCTGGGCCTGGAGGGGGAGCACCAGCGGTCCAACGCCGCCTTGGCCTTGACGTGGCCCACTGCTGGCTGCAGCG
GCAGGACCGCCATGGTGTGGGGAGCCAAAGGCATCCAGGCCAGGGCTCTGTGGCAGTGTCCCTGGCACCTGT
GTTCCAGCCCACATCCCACATGCGGCTCGGGCTTCGGAACACGGAGTGGCCGGGCGGACGCAGGTGTGCGGCG
CGGGCCCCTCACCTGGTACCTGGACGGTGCACACCGCCAGCAGCGCGCAGGCCTGCGTGCCTGGTTCGCGCA
GGCGCTGCAGGGCCGCGAGAGGCCGAGCGGTGGCCCCGAGGTTTCGAGTCTTGCTCTTCAATGCTACCGGGGACCG
GGACCCGGCGGCCCTGCTGAAGCTGCTGCAGCCCTGCCAGTTTGACTATGCCGTCTTCTGCCCTAACCTGACAGA
GGTGTCTATCCACAGGCAACGCAGACCAACAGAACTTCACAGTGACACTGGACCAGGTCTGCTCCGCTGCCTGGA
ACACCAGCAGCACTGGAACCACTGGACGAAGAGCAGGCCAGCCCGGACCTCTGGAGTGCCCCCAGCCCAGAGCC
CGGTGGGTCCGCATCCCTGCTTCTGGCGCCCCACCCACCCACACCTGCAGTGCCAGTCCCTCGTCTTCAGCTG
CATTTACATGCCTTGCAATGGATCAGCCAAGGCCGAGACCCCATCTTCCAGCCACCTAGTCCCCCAAAGGGCCT
CCTCACCCACCCTGTGGCTCACAGTGGGGCCAGCATACTCCGTGAGGCTGCTGCCATCCATGTGCTAGTCACTGG
CAGCCTGCACCTGGTGGGTGGTGTCTTGAAGCTGCTGGAGCCCCGCACTGTCCCAGTAGCCAAGGCCCGGGGTTGG
AGGTGGGAGCTTCCACACCTGCCTGCGTTCTCCCATGAACCTTACATACTAGGTGCCTTTTGTTTTTTGGCTTTC
CTGGTTCTGTCTAGACTGGCCTAGGGGCCAGGGCTTTGGGATGGGAGGCCGGGAGAGGATGTCTTTTTTAAGGCT
CTGTGCCTTGGTCTCTCCTTCTTGGCTGAGATAGCAGAGGGGCTCCCCGGGTCTCTCACTGTTGCAGTGGCC
TGGCCGTTTACGCTGTCTCCCCAACACCCCGCCTGCCTCCTGGCTCAGGCCAGCTTATTGTGTGCGCTGCCTG
GCCAGGCCCTGGGTCTTGCCATGTGCTGGGTGGTAGATTTCTCTCTCCAGTGCCTTCTGGGAAGGGAGAGGGCC
TCTGCCTGGGACACTGCGGGACAGAGGGTGGCTGGAGTGAATTAAAGCCTTTGTTTTT

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FIGURE 2776

MSRARSHLRAALFLAAASARGITTQVAARRGLSAWPVPQEPSMEYQDAVRMLNTLQTNAGYLEQVKRQRGDPQTQ
LEAMELYLARSGLQVEDLDRLNIIHVTGTKGKGSTCAFTECILRSYGLKTGFFRFGSGSASMGSPSVLSSSPSTS
GASTTGWRRPRMAAVSPCPPTSAS

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FIGURE 2777

TCACCCGGATGGCGGCTGCGACGCGCGGCTGCCGGCCCTGGGGCTCGCTCCTCGGGCTGCTCGGGCTGGTCTCGG
CCGCGGCCGCCGCTGGGACCTGGCTTCCCTGCGCTGCACCTTGGGCGCCTTTTGCGAATGCGACTTCCGGCCCCG
ACTTGCCGGGTCTGGAGTGTGACCTGGCTCAGCACCTGGCCGGCCAGCATCTGGCCAAGGCGCTGGTGGTGAAGG
CGCTGAAGGCCTTTGTGCGGGACCCAGCCCCACCAAGCCGCTGGTCCTCTCCCTGCACGGCTGGACGGCACC
GCAAAATCCTATGTCAGCTCCCTGCTGGCGCACTACCTCTTCCAGGGCGGCCCTCCGCAGCCCCCGCTGCACCACT
TTTCTCCCGTCTCTCACTTCCCCACCCAGCCACATCGAGCGCTACAAGAAGGATCTGAAGAGCTGGGTCCAAG
GGAACCTCACTGCCTGTGGCGCTCCCTCTTCTCTTCGATGAGATGGACAAGATGCCCCCAGGCCTGATGGAAG
TCCTGCGGCCTTTCTGGGCTCCTCCTGGGTGGTATACGGGACCAATTACCGCAAAGCCATCTTCATCTTCATCA
GGTGGGGCCCGCTTTGCAGTGGGCACAGTGGGGGGGCCACTTCTCAGAGGTTAGCTCTACAGCCTTAGCCTGT
GCTCCCAGCAGAATCCAGTTCCCATGGGCTTAGCTGGGCTTTCCAGTGGCCTCCGCCACTCTCAGAGATGACA
TTGTCAATCCGCTGGTTGATTTCCCTTTGGACATTCTCAGCAAATCTGGGCTCAGTCTTTTTGATCGCCACTT
CTTTGTGGAAGCCCTGCCAGGTCAAGAAGTTTCCCTCTTTTGTGGTGAGGAGGACACAGGCCTGGGAAAAATAG
GAACAGAGTTCTTGTCTTTAGTCCAGCTCTCAGAATCCTCGCTGTGTTTCTCAGGCAGCATGGCTCCGCCTC
TCTGAGCCTCTGTCTCTGCTTCTGAACAGCGGGGCCAATAATGATGCCCCGATGCCTTCCTGGAAGTTCAGTGAG
GGAAAGTCAGTTGAGGGACACAAAAGTGTTTTGTAACTATAAAGTACGTGGCATGTGTAGGTGAATTACAGGGG
CCATGGATGTGGACACCATGGAGGGGGAAGTGGAGCGTTTTTCAGTGGAGTTGGCTCCTCCCGCACTGAGCCATG
TTCTATGTGAGGTGGCAGCGGGGAAGCGAGGGTCCAATCTGCCCTGCGCTAGTCTCATCTGAGTCTCAGCCT
GGGTCCCCCATGGTTTTAGCAACACGGGTGGCAAGCAGATCAACCAGGTGGCATTGGAGGCGTGGCGCAGCCGC
GGGACCGCGAGGAGATCCTCCTGCAGGAGCTGGAGCCGGTCATCTCCCGCGCGGTGCTGGACAACCCGCAACCGTG
AGTCTGGCTCAGCAGCCCCCTCCCGGGCAGCTTACCCCCACACCCAGGGGCCAGGCTCTCCCGGGGTCTCATGCT
TTGCCCACTGACCCGGCAGTTCTGAGCCTGGCTTTGGCACTCCAGCTTTGTGACTTTGGGTGAGCCTTACAGCC
CCTGAGTCCTACACCCAGAAGGCGGCTGAGGGAACTGAGGCCAGCATTTTTCTCCTGCCCCCTGGGGGTTTGGGG
CCGGCTTCTCCCTCTTGTGAAGCACAAGTCCCTCCCCACCTACCTTCTGAGATGGCTTCTCAAACCTCGG
GCATCATGGAAGAGCGCCTCCTAGACGCAGTGGTGCCCTTCTCCCGCTCCAGCGGCACCACGTCCGGCACTGCG
TGCTCAACGAGCTGGCCAGCTGGGCCTGGAGCCAAGGGATGAGGTTGTCCAGGCTGTGCTGGACAGCACCACCT
TCTTCCCTGAAGACGAGCAGCTCTTCTCCTCCAACGGCTGCAAGACCGTGGCCTCCCGAATCGCCTTCTTCTCT
GACTCTCTGAGTGGTGTCTCGGCCCCCTGATGGCCAGGCCATGCAGGAAAGGCCAGGGGCCCTGTGTACAGGA
ACCCAGAGCACCAAGTGAGATGAACGGAGTGTGGGCTAGGCCACGGGACAGATGGCCAGGAAGGGCCCTGGCCTC
TAAACTGGCTCGAGAGCATCTTGGCCCCGGCCACCTTCCCCAGGGAAACCCCTGGTCACCCAGAACCTCACTGA
GCCTTGACCTCCCCCTGCAGCCTGAGCCTTCTTACTGTGAATTATAACTCAGGGACTGTGGCTCGTGGCGGTGCT
CCCTCCTCAGTCTGCCACCCCTTGCCCTTGCCTCCTTGGTCGGGCACCATACCTCCTCCCTCCACCCACACCC
TGTGTCCATATCAAGCCAGGTGGAGCCTTCTCAGTTTCCAGAAATGGAGGGACTCAAGCTGCCACTTGGGCCTGG
TTTTAGATGTTTTTAATTTTGTAAAAGAAAACAAGTATAATAAATCAGCTGTGGGACCAAG

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FIGURE 2778A

GCGCCAGCGGGCTCCGCCTGAGCAGCGCGGGCAACAGCGGCGGGCTCGGCCGGATCGGGCCGCGACACCTCCTGG
 CCATGGGGGACGTGCTGTCCACGCACCTGGACGACGCCCGGCCAGCACATCGCAGAAAAACCGGGAAGATCC
 TGACGGAGTTCTTCCAGTTCTATGAAGACCAGTATGGCGTGGCTCTCTTCAACAGCATGCGCCATGAGATTGAGG
 GCACGGGGCTGCCGAGGCCAGCTGCTCTGGCGCAAGGTGCCACTGGACGAGCGCATCGTCTTCTCGGGGAACC
 TCTTCCAGCACCAGGAGGACAGCAAGAAGTGAGAAACCGCTTCAGCCTCGTGCCCCACAACCTACGGGCTGGTGC
 TCTACGAAAAACAAAGCGGCCTATGAGCGGCAGGTCCCACCACGAGCCGTCATCAACAGTGCAGGCTACAAAATCC
 TCACGTCCGTGGACCAATACCTGGAGCTCATTGGCAACTCCTTACCAGGGACCACGGCAAAGTTCGGGCAGTGCCC
 CCATCCTCAAGTGCCCCACACAGTTCCCGCTCATCCTCTGGCATCCTTATGCGCGTCACTACTACTTCTGCATGA
 TGACAGAAGCCGAGCAGGACAAGTGGCAGGCTGTGCTGCAGGACTGCATCCGGCACTGCAACAATGGAATCCCTG
 AGGACTCCAAGGTAGAGGGCCCTGCGTTTACAGATGCCATCCGATGTACCGACAGTCCAAGGAGCTGTACGGCA
 CCTGGGAGATGCTGTGTGGGAACGAGGTGCAGATCCTGAGCAACCTGGTGATGGAGGAGCTGGGCCCTGAGCTGA
 AGGCAGAGCTCGGCCCGCGGTGAAGGGGAAACCGCAGGAGCGGCAGCGGCAGTGGATCCAGATCTCGGACGCCG
 TGTACCACATGGTGTACGAGCAGGCCAAGGCGCGCTTCGAGGAGGTGCTGTCCAAGGTGCAGCAGGTGCAGCCGG
 CCATGCAGGCCGTCATCCGAAGTACATGGACCAAAATTATCACCTCCAAGGAGCACCTTGCCAGCAAGATCCGAG
 CCTTCATCCTCCCAAGGCAGAGGTGTGCGTGCAGAACCATGTCCAGCCCTACATCCCATCCATCCTGGAGGCC
 TGATGGTCCCCACCAGCCAGGGCTTCACTGAGGTGCGAGATGTCTTCTTCAAGGAGGTACGGACATGAACCTGA
 ACGTCATCAACGAGGGCGGCATTGACAAGCTGGGCGAGTACATGGAGAAGCTGTCCCGGCTGGCGTACCACCCC
 TGAAGATGCAGAGCTGCTATGAGAAGATGGAGTCGCTGCGACTGGACGGGCTGCAGCAGCGATTTGATGTGTCCA
 GCACGTCCGTGTTCAAGCAGCGAGCCCAGATCCACATGCGGGAGCAAATGGACAATGCCGTGTATACGTTTCGAGA
 CCCTCCTGCACCAGGAGCTGGGGAAGGGGCCCCACCAAGGAGGAGCTGTGCAAGTCCATCCAGCGGGTCTGGAGC
 GGGTGTGAAGAAATACGACTACGACAGCAGCTCTGTGCGGAAGAGGTTCTTCCGGGAGGGCGCTGCTGCAGATCA
 GCATCCCGTTCTGCTCAAGAAGCTGGCCCTACCTGCAAGTCCGAGCTGCCCGGTTCCAGGAGCTGATCTTCG
 AGGACTTTGCCAGGTTTATCCTGGTGGAAAACACGTACGAGGAGGTGGTGTGTCAGACCGTCTGAAGGACATCC
 TGCAGGCTGTGAAGGAGGCCGCGGTGCAGAGGAAGCACAACCTCTACCGGGAACAGCATGGTCTGCACAACAGCG
 ACCCAACCTGCACCTGCTGGCCGAGGGCGCCCCCATCGACTGGGGCGAGGAGTACAGCAACAGCGGCGGGGGCG
 GCAGCCCCAGCCCCAGCACCCCGGAGTCAGCCACCCCTCTCGGAAAAGCGACGGCGCGCCAAGCAGGTGGTCTCTG
 TGGTCCAGGATGAGGAGGTGGGGCTGCCCTTTGAGGCTAGCCCTGAGTCACCACCACCTGCGTCCCCGGACGGTG
 TCACTGAGATCCGAGGCCTGCTGGCCCCAAGGTCTGCGGCCTGAGAGCCCCCACCAGCCGGCCCCCTGCTCAACG
 GGGCCCCCGCTGGGGAGAGTCCCCAGCCTAAGGCCGCCCCCGAGGCCTCCTCGCCGCTGCCTCACCCCTCCAGC
 ATCTCCTGCCTGGAAAGGCTGTGGACCTTGGGCCCCCAAGCCAGCGACCAGGAGACTGGAGAGCAGGTGTCCA
 GCCCCAGCAGCCACCCCGCCCTCCACACCACCACCGAGGACAGTGCAGGGGTGCAGACTGAGTTCTAGGCCAGTG
 GGTCCCTGACTGCTGCACATGGCACAGGCCGTTCCCTTCCGGACCCAGGCAGGCTCAGCTCTGGGGAGGGCACCC
 TGGTCTGTGCCCTTGTGGGTGGAGGCGGGGCAGGGCTGTGTGGCACCGCCAGGGAGCGGGCCACCTGAGTCACTT
 TATTGGGTTTCACTCAACACTTTCTTGTCTCCCTGTTTTCTCTTCTGTGGGATGATCTCAGATGCAGGGGCTGGTTT
 TGGGGTTTTCTGCTTGTGCCAAGGGCTGGACACTGCTGGGGGGCTGGAAAGCCCCCTCCCTTCTGTCTTCTGT
 GGCTCCATCCCCCTCATGGGTGCTGCCATCCTTCTGAGAGAGAGGGAGGTGAAAGCTGGTGTGAGCCAGTGGGT
 TCCCGCCCACTCACCCAGGAGCTGGCTGGGCCAGGACCGGGAGAGGGAGCACTGCTGCCCTCCTGGCCCTGCTCC
 TTCCGCAAGTTAGGGGTGGACCGAGCCTCGCTTTCCCACTGTTCTGGAGGGAAGGGGAAGGAGGGGTCTTCAGG
 CTGGAGCCAGGCTGGGGGTGCTGGGTGGAGAGATGAGATTTAGGGGTGCTCATGGGGTGGGCAGGCCCTGGGGT
 GAAATGAGAAAGGCCAGAACGTGCAGGTCTGCGGAGGGGAAGTGTCTGAGTGAAGGAGGGGACCCCATCCTG
 GGGGATGCTGGGAGTGAGTGAGTGAGATGGCTGAGTGAGGGTTATGGGGAGCCTGAGGTTTTATGGGCTGTGTA
 TCCCTTCTCCCGCCCCAGCCTGCCTCCCTCCTGCCCCGCTGGCCCCACAGGTCTCCCTCTGTCTCCTGTCCCTC
 TGGTGGTTGGGGATGGAGCGGCAGCAAGGGGTGTAATGGGGTACAGGTTGGGTGGGCCCTCCCTGAGGGTCTGGG
 CTCAGTGGTTGCTGGGGAGCCGGACGGGGCTCCTGAGGGGTACAGGTTGGGTGGGCCCTCCCTGAGGGTCTGGG
 GTCAGGCTTTGGCCTCTGCTGCCCTCTCAGTCACCAAGTCACTCCCTCTGAAAATCCAGTCCCTTCTTTGGATGT
 CCTTGTGAGTCACTCTGGGCCCTGGCTGTCTCCCTCCTCAGCTTCTTGTTCCTGGGACAAGGGTCAAGCCAGGAT
 GGGCCAGGCTGGGATCCCCACCCAGGACCCCCAGGCCCCCTCCCTGCTGCTTTGCGGGGGGACAGGGCAGA
 AATGGACTCCTTTTGGGTCCCCGAGGTGGGGTCCCTCCAGCCCTGCATCCTCCGTGCCCTAGACCTGCTCCCC

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FIGURE 2778B

AGAGGAGGGGCCTTGACCCACAGGACGTGTGGTGGCGCCTGGCACTCAGGGACCCCCAGCTGCCGCAGCCCTGGT
CTCTGGCGCATCTCTTCCCTCTTGTCCCGAAGATCTGCGCCTCTAGTGCCTTTTGAGGGGGTTCCCATCATCCCTC
CCTGATATTGTATTGAAAATATTATGCACACTGTTCATGCTTCTACTAATCAATAAACGCTTTATTT

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FIGURE 2779

MGDVLSTHLDDARRQHIAEKTGKILTEFLQFYEDQYGVALFNSMRHEIEGTGLPQAQLLWRKVPLDERIVFSGNL
FQHQEDSKKWRNRFSLVPHNYGLVLYENKAAYERQVPPRAVINSAGYKILTSVDQYLELIGNSLPGTTAKSGSAP
ILKCPTQFPLILWHPYARHYFFCMMTEAEQDKWQAVLQDCIRHCNNGIPEDSKVEGPAFTDAIRMYRQSKELYGT
WEMLCGNEVQILSNLVMEEELGPELKAELGPRKKGKQERQRQWQIISDAVYHMYEQAKARFEEVLSKVQQVQPA
MQAVIRTDMDQIITSKEHLASKIRAFILPKAEVCVRNHVQPYIPSILEALMVPTSQGFTEVRDVFFKEVTDMLN
VINEGGIDKLGEYMEKLSRLAYHPLKMQSCYEKMESLRDLGLQQRFDVSSTSVFKQRAQIHMREQMDNAVYTFET
LLHQELGKGPTKEELCKSIQRVLERVLKKYDYDSSSVRKRFFREALLOISIPFLLKKLAPTCKSELPRFQELIFE
DFARFILVENTYEEVVLQTVMKDILQAVKEAAVQRKHNLYRDSVMHNSDPNLHLLAEGAPIDWGEEYSNSGGGG
SPSPSTPESATLSEKRRRAKQVSVVQDEEVGLPFEASPESPPPASPDGVTEIRGLLAQGLRPESPPPAGPLLNG
APAGESPQPKAAPAEASSPPASPLQHLLPGKAVDLGPPKPSDQETGEQVSSPSSHPALHTTTEDSAGVQTEF

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FIGURE 2780

CTCTCGGCTTTTCGGCTCGGAGGAGGCCAAGGTGCAACTTCCTTCGGTCGTCCCGAATCCGGGTTTCATCCGACACC
AGCCGCCTCCACCATGCCGCCGAAGTTCGACCCCAACGAGATCAAAGTCGTATACCTGAGGTGCACCGGAGGTGA
AGTCGGTGCCACTTCTGCCCTGGCCCCCAAGATCGGCCCCCTGGGTCTGTCTCCAAAAAAGTTGGTGATGACAT
TGCCAAGGCAACGGGTGACTGGAAGGGCCTGAGGATTACAGTGAACTGACCATTCAGAACAGACAGGCCCCAGAT
TGAGGTGGTGCCTTCTGCCTCTGCCCTGATCATCAAAGCCCTCAAGGAACCACCAAGAGACAGAAAGAAACAGAA
AAACATTAAACACAGTGGGAATATCACTTTTGATGAGATTGTCAACATTGCTCGACAGATGCGGCACCGATCCTT
AGCCAGAGAACTCTCTGGAACCATTAAAGAGATCCTGGGGACTGCCCAGTCAGTGGGCTGTAATGTTGATGGCCG
CCATCCTCATGACATCATCGATGACATCAACAGTGGTGCTGTGGAATGCCCAGCCAGTTAAGCACAAAGGAAAAC
ATTTCAATAAAGGATCATTTGACAACCTGGTGA

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FIGURE 2781

MPPKFDPNEIKVVYLRCTGGEVGATSALAPKIGPLGLSPKKVGDDIAKATGDWKGLRITVKLTIQNRQAQIEVVP
SASALI IKALKEPPDRKKQKNIKHSGNITFDEIVNIARQMRHRSLARELSGTIKEILGTAQSVGCNVDGRHPHD
IIDDINSGAVECPAS

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FIGURE 2782

AACCACCATTTTGCAAGGACC**ATG**AGGCCACTGTGCGTGACATGCTGGTGGCTCGGACTGCTGGCTGCCATGGGA
GCTGTTGCAGGCCAGGAGGACGGTTTTGAGGGCACTGAGGAGGGCTCGCCAAGAGAGTTTATTTACCTAAACAGG
TACAAGCGGGCGGGCGAGTCCCAGGACAAGTGACCTACACCTTCATTGTGCCCCAGCAGCGGGTCACGGGTGCC
ATCTGCGTCAACTCCAAGGAGCCTGAGGTGCTTCTGGAGAACCAGTGCATAAGCAGGAGCTAGAGCTGCTCAAC
AATGAGCTGCTCAAGCAGAAGCGGCAGATCGAGACACTGCAGCAGCTGGTGGAGGTGGACGGCGGCATTGTGAGC
GAGGTGAAGCTGCTGCGCAAGGAGAGCCGCAACATGAACCTCGCGGGTCACGCAGCTCTACATGCAGCTCCTGCAC
GAGATCATCCGCAAGCGGGACAACGCGTTGGAGCTCTCCAGCTGGAGAACAGGATCCTGAACCAGACAGCCGAC
ATGCTGCAGCTGGCCAGCAAGTACAAGGACCTGGAGCACAAGTACCAGCACCTGGCCACACTGGCCCACAACCAA
TCAGAGATCATCGCGCAGCTTGAGGAGCACTGCCAGAGGGTGCCCTCGGCCAGGCCCCTCCCCAGCCACCCCCC
GCTGCCCCGCCCGGGTCTACCAACCACCCACCTACAACCGCATCATCAACCAGATCTCTACCAACGAGATCCAG
AGTGACCAGAACCTGAAGGTGCTGCCACCCCCTCTGCCCACTATGCCCACTCTCACCAGCCTCCCATCTTCCACC
GACAAGCCGTCGGGCCCCATGGAGAGACTGCCTGCAGGCCCTGGAGGATGGCCACGACACCAGCTCCATCTACCTG
GTGAAGCCGGAGAACACCAACCGCCTCATGCAGGTGTGGTGCAGACAGAGACACGACCCCGGGGGCTGGACCGTC
ATCCAGAGACGCCTGGATGGCTCTGTAACTTCTTCAGGAACCTGGGAGACGTACAAGCAAGGGTTTGGGAACATT
GATGGCGAATACTGGCTGGGCCTGGAGAACATTTACTGGCTGACGAACCAAGGCAACTACAACTCCTGGTGACC
ATGGAGGACTGGTCCGGCCGCAAAGTCTTTGCAGAATACGCCAGTTTCCGCCTGGAACCTGAGAGCGAGTATTAT
AAGCTGCGGCTGGGGCGCTACCATGGCAATGCGGGTGACTCCTTTACATGGCACAACGGCAAGCAGTTTACCACC
CTGGACAGAGATCATGATGTCTACACAGGAACTGTGCCCACTACCAGAAGGGAGGCTGGTGGTATAACGCCTGT
GCCCACTCCAACCTCAACGGGTCTGGTACCGCGGGGGCCATTACCGGAGCCGCTACCAGGACGGAGTCTACTGG
GCTGAGTTCCGAGGAGGCTCTTACTCACTCAAGAAAGTGGTGATGATGATCCGACCGAACCCCAACACCTTCCAC
TAAGCCAGCTCCCCCTCC

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FIGURE 2783

MRPLCVTCWWLGLLAAMGAVAGQEDGFEGTEEGSPREFIYLNRYKRAGESQDKCTYTFIVPQQRVTGAICVNSKE
PEVLLENRVHKQELELLNNE LLKQKRQIETLQQLVEVDGGIVSEVKLLRKESRNMNSRVTQLYMQLLHEIIRKRD
NALELSQLENRILNQTADMLQLASKYKDLEHKYQHLATLAHNQSEIIAQLEEHQCRVPSARPVPQPPPAAPPRVY
QPPTYNRIINQISTNEIQSDQNLKVLPPPLPTMPTLTSLPSSTDKPSGPWRDCLQALEDGHDTSSIYLVKPENTN
RLMQVWCDQRHDPGGWTVIQRRLDGSVNFFRNWETYKQGFNIDGEYWLGLENIYWLTNQGNKLLVTMEDWSGR
KVFAEYASFRLEPESEYYKLRLGRYHGNAGDSFTWHNGKQFTTLDRDHDVYTGNC AHYQKGGWWYNACAHSNLNG
VWYRGGHYRSRYQDGVYWAEFRGGSYSLKKVMMIRPNPNTFH

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FIGURE 2784A

CAGGATATAATTGATACAGCATGTGAAGTATTGGCCGACCCTTCTCTTCCGGAAGTGTCTGGGGAACAGAGCCA
ACTTCTGGCCTTGGGATCATTCTGGACAGTGTGTGTGGAATGTTTCCCCACCTTCTCTCCCCACTCCTGCAACTG
CTCCGAGCCCTGGTATCAGGGAAGTCCACAGCCAAAAAGGTGTATAGCTTCTTGGATAAGATGTCTTTCTACAAT
GAACTTTATAAACACAAGCCTCATGATGTGATCTCCCATGAAGATGGAAGTCTTTGGCGGAGACAAACACCCAAA
CTCCTTTATCCCTTGGGGGTCAAACCAACCTTCGCATACCTCAAGGCACTGTGGGCCAAGTAATGTTGGATGAT
AGGGCATACTGGTACGCTGGGAATACTCCTATAGCAGCTGGACCCTCTTTACCTGCGAGATTGAAATGTTGCTT
CATGTTGTTTCAACTGCAGATGTGATTGAGCACTGCCAGCGAGTCAAACCCATCATTGATCTCGTCCATAAGGTC
ATCAGTACAGACCTGTGATAGCAGACTGTCTCCTGCCATCACATCTCGCATCTACATGCTGCTGCAGCGGTTA
ACGACAGTGTCTCCCCACCTGTGGATGTGATTGCTTCTTGTGTCAACTGCTTAACTGTTTTGGCTGCCCGCAAT
CCAGCAAAGGTCTGGACTGATCTTCGTACACAGGTTTTTACCATTGTGGCCCATCCTGTCTCCAGCCTGAGT
CAGATGATTAGTGCAGGAAGGGATGAATGCTGGAGGGTACGGAACCTCTTGATGAACAGTGAACAGCCTCAGGGC
GAGTATGGGGTTACTATTGCCTTTCTGCGCTTGATCACCACCCTTGTCAGGGGCAACTTGGTAGTACCCAGAGC
CAAGGACTTGTACCCTGTGTAATGTTTGTGCTGAAGGAGATGCTTCCAGCTACCATAAGTGGCGCTACAACCTCT
CATGGAGTGAGGGAACAGATTGGTTGCCTGATCTTGGAGCTGATTGATGCGATACTGAACCTGTGCCAGGAGACA
GACCTGCACAGCAGTCATACTCCAGCCTGCAGTTTCTCTGCATCTGCAGCCTGGCATAACAGAAAGCAGGACAG
ACAGTTATCAATATCATGGGCATTGGCGTGGACACCATTGACATGGTGATGGCTGCTCAGCCTCGAAGTGATGGG
GCAGAGGGCCAGGGGCGAGGCGAGCTGCTGATCAAGACAGTGAAGTGGCATTCTCCGTCACCAACAATGTTATT
CGGCTGAAACCTCCTTCTAATGTGGTGTCCCCCTGGAACAGGCTCTCTCACAACATGGTGCTCATGGAACAAC
CTCATTGCTGTTCTAGCCAAATACATCTACCACAAACATGACCCTGCTTTGCCACGTCTTGCCATTGAGCTGCTG
AAACGTCTGGCCACGGTGGCCCCAATGTGAGTGTATGCTTGTCTGGGCAATGATGCGGCTGCCATTGCTGATGCC
TTCCTGACCCGATTGCAGAGCAAAATTGAGGACATGCGCATCAAAGTCATGATTCTAGAGTTCTCTACTGTTGCA
GTAGAGACCCAGCCAGGCCTCATCGAAGTGTCTGAACTGGAAGTTAAGGATGGCAGTGATGGCTCAAAGGAA
TTCAGCCTTGGGATGTGGAGCTGTCTCCATGCAGTGTGGAGCTGATTGATTCCCAACAGCAAGATCGATACTGG
TGCCCCACCCCTGCTGCATCGTGCCGCCATTGCCTTTTTGTCATGCTCTGTGGCAGGATCGGAGGGACAGTGCCATG
CTGGTCTCTCCGAACCAAAACCAAGTTTTGGGAAAATTTAACCAGTCCGCTGTTTGGAAACCCCTTCTCTCCCTCT
GAAACATCAGAGCCCAGCATCCTGGAAACCTGTGCCCTAATCATGAAGATAATTTGCTTGGAGATATACTATGTA
GTAAAGGGTTTATTAGACCAGTCATTAAAGGATACACTGAAGAAATTTTCCATCGAGAAACGCTTTGCCTACTGG
TCAGGGTATGTCAAGTCATTGGCAGTTCACGTGGCCGAAACAGAAGGCAGCAGCTGCACCTCCTTGTAGAGTAC
CAGATGCTGGTGTCCGCCTGGAGGATGCTTCTCATCATTGCCACCCTCATGCAGATATAATGCACCTGACTGAC
TCTGTGGTGCCTGCCAGCTCTTTCTTGACGTGCTTGATGGAACCAAGCATTACTCCTAGTTCCAGCCTCAGTG
AACTGCCTTCGCCTTGGCTCCATGAAGTGCACTCTGCTGCTTATCCTCCTCCGGCAGTGGAAGAGAGAGTTAGGT
TCTGTGGATGAAATCCTTGGACCCTTGACGGAGATCCTGGAGGGAGTGCTGCAGGCCGACCAGCAACTCATGGAG
AAGACCAAGGCCAAGGTGTTCTCAGCATTATCACAGTGTGCAAATGAAGGAGATGAAAGTAAGTGACATCCCC
CAGTACTCCCAGCTGGTGTGTAATGTCTGTGAGACCCTCCAAGAGGAAGTGATTGCACTCTTCGACCAGACCCGC
CACAGTCTGGCATTAGGCAGTGCCACAGAGGACAAGGACAGCATGGAGACTGACGACTGTTCTCGGTCCCGGCAC
AGGGACCAGCGTGATGGGGTGTGTGCTGGGCCGTGCACCTGGCCAAGGAGCTGTGTGAGGTAGACGAGGATGGT
GACTCCTGGCTGCAGGTAACCCGCAGGCTCCCCATCCTACCCACCCCTCCTACCACTCTAGAGGTGAGCCTTCGC
ATGAAGCAGAACCTGCATTTCACTGAGGCCACATTGCATCTGCTCCTCACCCTGGCTCGCACTCAGCAGGGAGCC
ACAGCAGTGGCTGGAGCTGGCATCACCCAGAGCATTGTTTGGCCCTTCTGAGTGTGTACCAGCTGAGCACCAC
GGCACAGCACAGACACCTAGTGCTCTCGGAAGTCCCTGGATGCCCCCTCTTGCCAGGAGTCTACCGCCTGTCC
ATGTCCCTGATGGAGCAGCTGCTCAAACTCTGCGTACAACCTCCTGCTGAGGCCCTGGACTTCGTGGGTGTCT
CACCAGGAGCGGACCTTACAGTGCCTCAACGCAGTGAGGACAGTGACAGTCTGGCCTGCCTGGAGGAGGCGGAC
CACACCGTGGGTTTTATTCTGCAGCTCTCTAACTTCATGAAGGAGTGGCACTTCCACCTGCCTCAGCTCATGCGT
GATATCCAGGTCAACCTGGGTTACTTGTGCCAGGCATGTACCTCTCTCCTGCACAGTCGAAAGATGCTGCAGCAT
TACTTACAGAACAAAAATGGGGATGGCCTCCCTCAGCTGTGTGCCAGCGAGTCCAGAGGCCACCGTCTGCTGCT
TCTGCTGCCCCCTCCTCCTCAAAGCAGCCCGTGTGTGACACAGAGGCATCAGAGCAGCAGGCCTTGACACAGTC
CAGTATGGCCTTCTCAAGATCCTCAGCAAGACGCTGGCAGCCCTGCGCCACTTCACCCAGATGTCTGCCAGATT
CTGCTGGATCAGTCCCTGGACCTTGCTGAATACAACCTCTCTGTTGCCCCGAGCTTTACCACTCCCACCTTTGAC

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FIGURE 2784B

TCCGAAGTGGCCCCCTCCTTCGGGACCCTTCTGGCCACAGTGAATGTGGCCCTCAACATGCTTGGAGAGCTGGAC
AAGAAAAAGGAGCCCCCTCACCAGGCAGTGGGGCTCAGCACACAGGCAGAAGGGACCAGGACGTTAAAGTCCCTC
CTGATGTTTACCATGGAAAAGTCTTCTACCTGCTCATCTCTCAGGCGATGCGGTACCTTAGGGACCCGGCTGTG
CACCCCCGGGACAAACAGCGGATGAAGCAGGAGCTCAGCTCTGAGTTGAGCACGCTGCTGTCCAGCCTCTCGCGC
TACTTCCGCGGGGAGCCCCCAGCTCCCCTGCCACTGGTGTCTCCCTCGCCGCAGGGCAAGTCCACCTCTCTC
TCCAAAGCCAGCCCTGAGAGTCAGGAGCCTCTGATCCAGTTGGTGCAGGCGTTTGTCCGGCATATGCAAAGATAG
GGCAGTGCTGTTCTGCCCCACCTACCCCTCTCCACCAGCCTACACTGCACCCTGGCTGGCAGGGGTGCTGCTGGCT
GCTAGGGCCTATACAATGGAGGGCACCTCCTGTCACCCCCTCCCGGAGTAGCCACGACTCCAGCCACCACCCAC
TGACGTTATTTTATACTAGATGAAGAGGTCAACAGCAGGCATGGGGAGCCGAGTCTTCTGTGCTCAGGTCTCTCA
CGCTGCAGACGCCCCCTAGAGGAACTTTCCTTCCTTCCAGCATTCCCCACAGCACTGCCGGCCAGGGGAGAGGC
GGCAGCCCAGCAGAGGGCTCTATGCACGGGTTTCAAACCTGTTTTCCACACTCTGTCTTGCAGTTTTGGTAATT
CTGTGGTCTATTTATACAGATATTAAAATCTTGTTTATAG

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FIGURE 2785

MASGGGVRASGRAKMAAAAGGPCVRSSRELWTILLGRSALRELSQIEAELNKHWRRLLEGLSYYKPPSPSSAEKV
KANKDVASPLKELGLRISKFLGLDEEQSVQLLQCYLQEDYRGTRDSVKTVLQDERQSQALILKIADYEEERTCI
LRCVLHLLTYFQDERHPYRVEYADCVDKLEKELVSKYRQQFEELYKTEAPTWETHGNLMTERQVSRWFVQCLREQ
SMLLEIIFLYYAYFEMAPSDLLVLTKMFKEQGFGRQTNRHLVDETMDFVDRIGYFSALILVEGMDIESLHKCA
LDDRRELHQFAQDGLICQDMDCLMLTFGDIPHHAPVLLAWALLRHTLNPEETSSVVRKIGGTAIQLNVFYQLTRL
LQSLASGGNDCTTSTACMCVYGLLSFVLTSLELHTLGNQQDIIDTACEVLADPSLPELFWGTEPTSGLGIILDSV
CGMFPHLLSPLLQLLRALVSGKSTAKKVYSFLDKMSFYNELYKHKPHDVISHDGTLWRRQTPKLLYPLGGQTNL
RIPQGTVGQVMLDDRAYLVRWEYSYSSWTLFTCEIEMLLHVSTADVIQHCQRVKPIIDLHVHKVISTDLSIADCL
LPITSRIYMLLQRLTTVISPPVDVIASCVNCLTVLAARNPAKVWTDLRHTGFLPFVAHPVSSLSQMISAEGMNAG
GYGNLLMNSEQPQGEYGVTTIAFLRLITTLVKQQLGSTQSQGLVPCVMFVLKEMPLSYHKWRYNSHGVREIQGLI
LELIHAILNLCHETDLHSSHTPSLQFLCICSLAYTEAGQTVINIMGIGVDTIDMVMAAQPRSDGAEQGQGGQLLI
KTVKLAFSVTNNVIRLKPPSNVVSPLQALSQHGAGHNNLI AVLAKYIYHKHDPALPRLAIQLLKR LATVAPMSV
YACLGNDAAAIRDAFLTRLQSKIEMRIKVMILEFLTVAVETQPGLIELFLNLEVKGSDGSGKEFSLGMWSC LHA
VLELIDSQQQDRYWCPPLLHRAAIAFLHALWQDRRDSAMLVLRTPKFWENLTSPLFGTLSPPSETSEPSILETC
ALIMKIIICLEIYYVVKGSLDQSLKDTLKKFSIEKRFAYWSGYVKSLAVHVAETEGSSCTSLLEYQMLVSAWRMLL
IIATTHADIMHLTDSVVRQLFLDVLGDGKALLLPASVNCLRLGSMKCTLLLILLRQWKSILSRELGSVDEILG
PLTEILEGLVLQADQQLMEKTKAKVFSAFITVLQMKEMKVS DIPQYSQVLVNCETLQEEVIALFDQTRHSLALGS
ATEDKDSMETDDCSRSRHRDQRDGVCVLGLHLAKELCEVDEDEGDSWLQVTRRLPILPTLLTTLEVSLRMKQNLHF
TEATLHLLLTARTQQGATAVAGAGITQSIICLPLLSVYQLSTNGTAQTPSASRKS LDAPSWPGVYRLSMSLMEQL
LKTLRYNFLPEALDFVG VHQERTLQCLNAVRTVQSLACLEEADHTVGFILQLSNFMKEWHFHLPLQLMRDIQVNLG
YLCQACTSLLHSRKMLQHLYLQNKNGDGLPSAVAQVRQRPSSAASAAPSSSKQPAADTEASEQQALHTVQYGLLKI
LSKTLAALRHFTPDVCQILLDQSLDLAEYNFLFALSFTTPTFDSEVAPSGFTLLATVNVALNMLGELD KKKKEPLT
QAVGLSTQAEGRTRLKSLMFTMENC FYLLISQAMRYLRDPAVHPRDKQRMKQELSELSTLLSSLSRYFRRGAP
SSPATGVLPSPOGKSTSLSKASPESQEPLIQLVQAFVRHMQR

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FIGURE 2786

AATTTGGCCAGGCTGAGAAGACTGAGCTTGATGCCCACTTTGAAAACCTTCTGGCCCGGGCAGACAGCACCAAGA
ACTGGACAGAGAAGATCTTGAGGCAGACAGAGGTGCTGCTGCAGCCCAACCCAGTGCCCGAGTGGAGGAGTTCC
TGTATGAGAAGCTGGACAGGAAGGTCCCCCTCAAGGGTCACCAACGGGGAGCTGCTGGCTCAGTACATGGCAGACG
CGGCCAGTGAGCTGGGGCCGACCACCCCTATGGGAAGACACTGATCAAGGTGGCAGAAGCTGAAAAGCAACTGG
GAGCCGCGGAGAGGGATTTTATCCACACGGCCTCCATCAGCTTCTCACACCCTTGCGCAACTTCTGGAGGGGG
ACTGGAAGACCATCTCGAAGGAGAGGGCGGCTCCTCCAAAACCGGCGTCTGGACTTGGATGCCTGCAAAGCGAGGC
TGAAGAAGGCCAAGGCTGCAGAAGCCAAAGCCACGTGTGAGGGAGATACGGTGCCTGACTTTTCAAGGAGACTAGAC
CTCGTAATTACATTCTCTCGGCCAGCGCCTCCGCGCTCTGGAATGATGAAGTGGACAAGGCCGAGCAGGAGCTCC
GCGTGGCCCGAGACAGAGTTTGACCGGCAAGCAGAAGTGACCCGTCTCTTGCTGGAGGGAATCAGTAGCACTCACG
TGAACCACCTGCGCTGCCTCCACGAGTTCGTCAAGTCTCAGACAACCTACTACGCACAGTGCTACCGCCACATGC
TGGACTTGCAGAAGCAGCTGGGCAGCTCCAGGGTGCCATATTTCGGGCACCTTCGTGGGCACCACAGAGCCCG
CCTCCCCACCCCTGAGCAGCACCTCACCCACCACTGCTGCGGCCACTATGCCTGTGGTGCCCTCTGTGGCCAGCC
TGGCCCTCCGGGGGAGGCCTCGCTCTGCCTGGAAGAGGTGGCCCCCCTGCCAGTGGGACCCGCAAAGCTCGGG
TGCTCTATGACTACGAGGCAGCCGACAGCAGTGAGCTGGCCCTGCTGGCTGATGAGCTCATCACTGTCTACAGCC
TGCCTGGCATGGACCCTGACTGGCTCATTGGCGAGAGAGGCAACAAGAAGGGCAAGGTCCCTGTACCTACTTGG
AACTGCTCAGTAGGCAGGTGCCCCCATCCCCCCCCGATTCTGGCCTAGGCAGGAGAGGATGGGCGCAGCCCTGC
CACTTAACCTTGTTTGTGGTGACACAGTTGTTTCAAGTGGGGAGAATTACCCCATTTCTGTCCCTGCCCCTAGTC
ACCTAGCTGTGAGGGTGCCCTGAGGCTGAATGGCTCCACCCCTCCCCCAGCCCTGCTTCTGACCTGTGGCTCTGGA
GCCCCTGCCCCTGCCTGCAATCCCCGAGCACCCACCCCTCCAGGCTCCACTAAGGAGGGAGGGGGCTGTCTGCAGCA
GCTGCACTCAGCACCTAGGCCAGGGTGGGGCCGCCGCAGATGGGCTCAGGAAGCCCCAGGTGCACTCAGCGAGAG
CCCTGCCCTTTCAGTTGCCAAAAGCTGCATCAGGGGAATGCGGCAAGGCACACAGGGCTCTGGCAGCCCCCTGGGGA
CTGGGCGCTGCCCCCTGGGAGGGGAGAGCCTGGCCAGGGCTGGTGTGGGGCCGGAGCAGCATCTTCCGGTGCTAT
CCTCCCCCTCCCACCCCTCACAGCTCAAGCCAAGTCCAGCGGCCGC

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FIGURE 2787

ATGCGCCCCGCGCGCCCCGCACTGACATGGCCGTCGCCCCGTTCCGCGCGTCCGCCGCGCGCCGGCCGTTAATAG
GCTTGCTCCCTGAGCGCCCCGCACCGACATGGCGGCCGTCTTCGCTGTGGTGACTTTAACTCTCGGTTTTTCGGTT
ATAGCCGGCCGGCGCTCAGTTGTCTTCAGGAAGCTCGGAGCCTTTGGTGGAGCCGGGGAGAGGAAGGGTGGGTGC
AAGAGTGAAAGGCGAGAGGGGACTGCAAGCATCCGGGTCGGCTCCTGGCCGGAGCAAGATGGCTGAGGGCGAGCG
GCAGCCGCCGCCAGATTCTTCAGAGGAGGCCCTCCAGCCACTCAGAACTTCATCATTCCAAAAAAGGAGATCCA
CACAGTTCCAGACATGGGCAAATGGAAGCGTTCTCAGGCATACGCTGACTACATCGGATTTCATCCTTACCCTCAA
CGAAGGTGTGAAGGGGAAGAAGCTGACCTTCGAGTACAGAGTCTCCGAGATGTGGAATGAGGTTTCATGAGGAAAA
GGAGCAGGCTGCAAAGCAGAGTGTGTCCTGCGATGAATGCATACCATTACCCCGCGCCGGGCACTGTGCACCTTC
GGAGGCCATTGAGAACTAGTCGCTCTTCTCAACACGCTGGACAGGTGGATTGATGAGACTCCTCCAGTGGACCA
GCCCTCTCGGTTTTGGGAATAAGGCATACAGGACCTGGTATGCCAACTTGATGAGGAAGCAGAAAACTTGGTGGC
CACAGTGGTCCCTACCCATCTGGCAGCTGCTGTGCCTGAGGTGGCTGTTTACCTAAAGGAGTCAGTGGGGAACTC
CACGCGCATTGACTACGGCACAGGGCATGAGGCAGCCTTCGCTGCTTTCTCTGCTGTCTCTGCAAGATTGGGGT
GCTCCGGGTGGATGACCAAATAGCTATTGTCTTCAAGGTGTTCATCGGTACCTTGAGGTTATGCGGAACTCCA
GAAAACATACAGGATGGAGCCAGCCGGCAGCCAGGGAGTGTGGGGTCTGGATGACTTCCAGTTTCTGCCCTTCAT
CTGGGGCAGTTTCGAGCTGATAGACCACCCATACCTGGAGCCCAGACACTTTGTGGATGAGAAGGCCGTTGAATGA
GAACCACAAGGACTACATGTTCTGGAGTGTATCCTGTTTATTACCGAGATGAAGACTGGCCCCATTTGCAGAGCA
CTCCAACCAGCTGTGGAACATCAGCGCCGTCCCTTCTGGTCCAAAGTGAACCAGGGTCTCATCCGCATGTATAA
GGCCGAGTGCCTGGAGAAGTTCCTGTGATCCAGCACTTCAAGTTCGGGAGCCTGCTGCCCATCCATCCTGTCAC
GTCGGGCTAGGAGGGGCCAAGCCGAAGAGCCACCCAGGCCACAGTTTCTGTGCTGCTTCCCCACCCACAGCAGT
GGCCCCCTCCCCATCCCCCTCCCTCTGTTCTGTCCTCCGTTTGATGAGAGGCTGTTTACTGGGGTGGGGTGGCGAGATGG
GCTTGAGGGGGCTCAGAGCATAAGGCTTCAGGGCCCAAGTTGGGAGAAGTGACCAAAGTGTAGCCAGTTTTCTGA
GTTCCCGTGTGCTAGACTGGCCAGAAGAGAGGGTCTGGGGCCTGCTCACTCGGCCACTCTCTCCTGTTTTCTGGCC
TCTTCTCCCTTCACTCCCGTCCAGTCTGGTTTTTGAGAGCAGGGGCTGTTCTGCAGCACCGCAGGGAAGGGAGGAG
AGATACTGCTGCTTCCATTGCTTTTTCCCTTCTCTGGAGTCGATGCCTTTCTAAGGGTTGGAGCTGCTCCTTGCAG
GGGCGGGTCAGTTTTCCAGGCCATGCCGGGGTGGCCATCTATGGTAGGGCTGGAAGCTGAGGCTGGCCGCCAGCT
GTGGGCTGGGGTGGGGTGGGGTGGGGTGGGGTGGGGTGGGGTGGGGTGGGGTGGGGTGGGGTGGGGTGGGGTGGGGT
CCTTTTACCCCTGCCCCCTGGGCCTGAGGCCCCCTGTGTCCAAGCCTCCCCCTGGCTCTTCAGTTCTCTAGCCCT
TGGCTCTGCTGGGTTTTCTGACTGTAGCCACATCTCTCCCGCTCCCTAAGGGTAACCTAGCCAATGGAAGCTGCC
CTTTGGGTAGGTGCTGGGCTCCTGGGAGGGGCCAGATGATGGGGTGGAGCATGTCTTTCCAGAACTTTCCCTGGC
AGGGAGGGGATGGCAGAACTCAGGGAGGGGCTTGGGGCCCATTTGTATCTGGAGAGCCTGGATTCTCTTGGCAG
TCTTAGGCCCCGGCCACTTCTGCTACCTTTGCGCTGCTGTGAGCCTCACCTGGGCCCTGGGCCCTGCTTCTCTG
CTCCCCTGGGTGATGGGTGGGGCCAGAAGGTGGCAGTCCACACCTTGTCTCTCCACCTCCCTGAAGTGTCCATT
GCTTTTATAGGGTGAAGTAAGAGACAGCCTCCCAAGCCCAGGCTTTGGCACTCAGAATGGGCCAGTGGGGGCTG
GGCAGGCCCATTGAGGGCCACCGCCGAGGTTTTCTCTAGGGCTGTTTCTGGGCTGGCTCTTACAGGCTCGTCCC
CCAGGCCCTGCCCTTCTCCACTGCCCCCTCCTGTGTCTGGGTCCACACACCTTCAGGAAGGGGGAGCACTGAGAA
GCACAGCACAGGGGCTCAGCCTGGGATCCGGTGTGGTCTGGGCAGAGGCTGGGTGAGGAGTCCCAAAGGTCAGT
GACAGTTTCTCAGAAAGAGGCCAGCGTCCACCTCTCTCCAGGGCCAGACAGCCCTTCTGGCTCCCCCATCCCC
CTATGGGCTCCCAGCCCCCTGCACCCCTCATTGCTGTTTCAAGCTTAAAGCCTCTGTTTTGCACCTGT

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FIGURE 2788

MSSKLLLEPAGAHLSGSSSEPLVEPGRGRVVGARVKGGERGLQASGSAPGRSKMAEGERQPPPDSSSEEAPPATQNFII
PKKEIHTVPDMGKWKRSQAYADYIGFILTLNEG VKGKKLTFEYRVSEMWNEVHEEKEQAAKQSVSCDECIPLPRA
GHCAPSEAIEKLVALNTLDRWIDETPPVDQPSRFGNKAYRTWYAKLDEEAENLVATVVPHTLAAAVPEVAVYLK
ESVGNSTRIDYGTGHEAAFAAFLCCLCKIGVLRVDDQIAIVFKVFNRYLEVMRKLQKTYRMEPAGSQGVWGLDDF
QFLPFIWGSSQLIDHPYLEPRHFVDEKAVNENHKDYMFLCILFITEMKTGPFAEHSNQLWNI SAVPSWSKVNQG
LIRMYKAECLEKFPVIQHFKFGSLLPIHPVTSG

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FIGURE 2789

ATGGAGTGCGCCCTGGACGCCCAGAGCCTGATCAGCATCTCCCTGCGCAAGATCCACAGCTCCCGAACCCAGCGC
GGCGGCATCAAGCTGCACAAGAACCCTCCTGCGCGCCCGCTTCGAGGACTTCTGCCCGGACTCGTCCCCGGACGCG
TCCAACATCTCAAACCTTGATCTCCATCTTTGGCTCCGGCTTCTCGGGGCTGGTGAGCCGACAGCCGGACTCCTCG
GAGCAGCCGCCGCCGCTCAACGGGCAGCTGTGCGCCAAGCAGGCGCTCGCCAGCCTCGGCGCCTGGACTCGAGCC
ATTGTCGCCTTCTAG

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FIGURE 2790A

ACAGCACAGACAGATTGACCTATTGGGGTGTTCGCGAGTGTGAGAGGGAAGCGCCGCGGCCTGTATTTCTAGAC
CTGCCCTTCGCTGGTTTCGTGGCGCCTTGTGACCCCGGGCCCCCTGCCGCTGCAAGTCGGAAATTGCGCTGTGCT
CCTGTGCTACGGCCTGTGGCTGGACTGCCTGCTGCTGCCCAACTGGCTGGCAAGATGAAGCTCTCCCTGGTGGCC
GCGATGCTGCTGCTGCTCAGCGCGGCGCGGGCCGAGGAGGAGGACAAGAAGGAGGACGTGGGCACGGTGGTGGC
ATCGACCTGGGGACCACCTACTCCTGCGTCGGCGTGTCAAGAACGGCCGCGTGGAGATCATGCCAACGATCAG
GGCAACCGCATCAGCCGTCCTATGTCGCCCTTCACTCCTGAAGGGGAACGTCTGATTGGCGATGCCGCCAAGAAC
CAGCTCACCTCCAACCCCGAGAACACGGTCTTTGACGCCAAGCGGCTCATCGGCCGCACGTGGAATGACCCGTCT
GTGCAGCAGGACATCAAGTCTTGGCGTTCAAGGTGGTTGAAAAGAAAATAAACCATACATTCAAGTTGATATT
GGAGGTGGGCAAACAAAGACATTTGCTCCTGAAGAAATTTCTGCCATGGTTCTCACTAAAATGAAAGAAACCGCT
GAGGCTTATTTGGGAAAGAAGGTTACCCATGCAGTTGTTACTGTACCAGCCTATTTTAATGATGCCAACGCCAA
GCAACCAAAGACGCTGGAACATTTGCTGGCCTAAATGTTATGAGGATCATCAACGAGCCTACGGCAGCTGCTATT
GCTTATGGCCTGGATAAGAGGGAGGGGAGAAGAACATCCTGGTGTGTTGACCTGGGTGGCGGAACCTTCGATGTG
TCTCTTCTCACCATTGACAATGGTGTCTTCGAAGTTGTGGCCACTAATGGAGATACTCATCTGGGTGGAGAAGAC
TTTGACCAGCGTGTCTATGGAACACTTCATCAAACTGTACAAAAGAGACGGGCAAAGATGTCAGGAAAGACAAT
AGAGCTGTGCAGAACTCCGGCGCGAGGTAGAAAAGGCCAAACGGGCCCTGTCTTCTCAGCATCAAGCAAGAATT
GAAATTGAGTCCTTCTATGAAGGAGAAGACTTTTCTGAGACCCTGACTCGGGCCAAATTTGAAGAGCTCAACATG
GATCTGTTCCGGTCTACTATGAAGCCCGTCCAGAAAGTGTGGAAGATTCTGATTTGAAGAAGTCTGATATTGAT
GAAATTGTTCTTGTGGTGGCTCGACTCGAATTCAAAGATTGAGCAACTGGTTAAAGAGTTCTTCAATGGCAAG
GAACCATCCCGTGGCATAAACCCAGATGAAGCTGTAGCGTATGGTGTGCTGTCCAGGCTGGTGTGCTCTCTGGT
GATCAAGATACAGGTGACCTGGTACTGCTTGATGTATGTCCCTTACACTTGGTATTGAAACTGTGGGAGGTGTC
ATGACCAAACCTGATTCCAAGGAACACAGTGGTGCTACCAAGAAGTCTCAGATCTTTTCTACAGCTTCTGATAAT
CAACCAACTGTTACAATCAAGGTCTATGAAGGTGAAAGACCCCTGACAAAAGACAATCATCTTCTGGGTACATTT
GATCTGACTGGAATTCCTCCTGCTCCTCGTGGGGTCCACAGATTGAAGTCACCTTTGAGATAGATGTGAATGGT
ATTCTTCGAGTGACAGCTGAAGACAAGGGTACAGGGGAACAAAATAAGATCACAATCACCAATGACCAGAATCGC
CTGACACCTGAAGAAATCGAAAGGATGGTTAATGATGCTGAGAAGTTTGCTGAGGAAGACAAAAGCTCAAGGAG
CGCATTGATACTAGAAATGAGTTGGAAGCTATGCCTATTCTCTAAAGAATCAGATTGGAGATAAAGAAAAGCTG
GGAGGTAACTTTCTCTGAAGATAAGGAGACCATGGAAAAAGCTGTAGAAGAAAAGATTGAATGGCTGGAAAGC
CACCAAGATGCTGACATTGAAGACTTCAAAGCTAAGAAGAAGGAACCTGGAAGAAATTTGTTCAACCAATTATCAGC
AACTCTATGGAAGTGACAGCCCTCCCCCACTGGTGAAGAGGATACAGCAGAAAAAGATGAGTTGTAGACACTG
ATCTGCTAGTGCTGTAATATTGTAAATACTGGACTCAGGAACCTTTTGTTAGGAAAAAATTGAAAGAACTTAAGTC
TCGAATGTAATTGGAATCTTCACCTCAGAGTGGAGTTGAAACTGCTATAGCCTAAGCGGCTGTTTACTGCTTTTC
ATTAGCAGTTGCTCATATGTCTTTGGGTGGGGGGGAGAAGAAGAATTGGCCATCTTAAAAAGCAGGTAAAAACC
TGGGTTAGGGTGTGTGTTACCTTCAAAATGTTCTATTTAACTGAGTCAATGTTTGTGAGAAGCTTCTAATTAGA
TCAATTACTTATTTTAGGAAATTTAAGACTAGATACTCGTGTGTGGGGTGAGGGGAGGGAGTATTTGGTATGTTG
GGATAAGGAAACACTTCTATTTAATGCTTCCAGGGATTTTTTTTTTTTTTTTTTAAACCTCCTGGGCCCAAGTGA
TCCTTCCACCTCAGTCTCCAGCTAATTGAGACCACAGGCTTGTACCACCATGCTCGGCTTTTGCATTAATCTA
AGAAAAGGGGAGAGAAAGTTAATCCACATCTTTACTCAGGCAAGGGGCATTTACAGTGCCCAAGAGTGGGGTTTT
CTTGAACATACTTGGTTTCCTATTTCCCTTATCTTTCTAAAACCTGCCTTTCTGGTGGCTTTTTTTAAATTTAT
ACTAATGATGCTTTTATAGCTGCTTGGATTCTCTGAGAAATGATGGGGAGTGAGTGATCACTGGTATTAACTTTA
TACACTTGGATTTCATTTGTAACCTTTAGGATGTAAAGGTATATTGTGAACCTAGCTGTGTGAGAATCTCCATCC
CTGAAATTTCTCATTAGTGGTACTGGGGTGGGATCTTGGATGGTGACATTGAACTACACTAAATCCCTCACTA
TGAATGGGTTGTTAAAGGCAATGTTTGTGTCAAACTGGTTTAGGATTACTTAGATTGTGTTCTGAAGAAAAG
AGTCCAGGTAAATGGTATGATCAATAAAGGACAGGCTGGTGCTAACATAAAATCCAATATTGTAATCCTAGCACT
TTGGGAGGCCAAGGCGGGTGGATCACAAGGTCAAGAGATAGAGACCATCTTTGCCAACATGGTGAACTCCATCT
CTACTGAAAATACAAAAATTAGCTGGGCGTGGTAGTGCAAGGCTGAGGCTGAGGCAGGAGATCACTCGAACCCG
GGAGGCAGAGGTTGCAGTGAGCCGAGATCACACCCTGTACTCCAGCCCGGCACTCCAGCCTGGCGACAAGAGTG
AGACTCCACCTCAAAAAAAGAAATCCAATACTGCCCAAGGATAGGTATTTTATAGATGGGCAACTGGCT

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FIGURE 2790B

GAAAGGTTAATTCTCTAGGGCTAGTAGAACTGGATCCCAACACCAAACCTCTTAATTAGACCTAGGCCTCAGCTGC
ACTGCCCGAAAAGCATTGTGGGCAGACCCTGAGCAGAATACTGGTCTCAGGCCAAGCCCAATACAGCCATTAAAGA
TGACCTACAGTGCTGTGTACCC TGGGGCAATAGGGTTAAATGGTAGTTAGCAACTAGGGCTAGTCTTCCCTTACC
TCAAAGGCTCTCACTACCGTGGACCACCTAGTCTGTAACCTCTTCTGAGGAGCTGTTACTGAATATTAAAAAGAT
AGACTTCAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2791

MKLSLVAAMLLLLSARAEEEDKKEDVGTVVGIDLGTTYSCVGVFKNGRVEIIANDQGNRITPSYVAFTPEGERL
IGDAAKNQLTSNPENTVFDKRLIGRTWNDPSVQQDIKFLPFKVVEKKTTPYIQVDIGGGQTKTFAPEEISAMVL
TKMKETAAYLGKKVTHAVVTPAYFNDAQRQATKDAGTIAGLNVMRIINEPTAAAIAYGDKREGEKNILVFDL
GGGTFDVSLLTIDNGVFEVVATNGDTHLGGEDFDQVRMEHFIKLYKKKTGKDVRKDNRAVQKLRRVEVEKAKRALS
SQHQARIEIESFYEGEDFSETLTRAKFEELNMDLFRSTMKPVQKVLEDSDLKKSDDIDEIVLVGGSTRIPKIQQLV
KEFFNGKEPSRGINPDEAVAYGAAVQAGVLSGDQDTGDLVLLDVCPLTLGIETVGGVMTKLIPRNTVVP TKKSQI
FSTASDNQPTVTIKVYEGERPLTKDNHLLGTFDLTGIPPAPRGVPQIEVTFEIDVNGILRVTAEDKGTGNKNKIT
ITNDQNRLTPEEIERMVNDAEKFAEEDKKLKERIDTRNELESYAYSLKNQIGDKEKLGKKLSSDKETMEKAVEE
KIEWLESHQDADIEDFKAKKKELEEIVQPIISKLYGSAGPPPTGEEDTAEKDEL

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FIGURE 2792

CCTAAGTCGCCGCAGAACTGCCACGTGGGGATGAGATTTGCTGGGCTGGTAGCGGCGGCTGCTGCGGGGAGGTCC
CGCCCACGTGAAGCCAGCCTAACTGAGCTCTGGACTTTGGGGACAGCTGTCAGTGGCCTAGGCCGCAGGACACCA
TGAAGCAACTGCCAGTCTTGGAACCTGGAGACAAGCCCAGGAAAGCAACATGGTAACCTTGACTGTCCCTGGAG
ACAGCCCCGTGTGCTCGAGTTGGCCACAGCTGTTTCATATTTACCCCCAGTTGGTAATGCCAAGAGAGGGGAAGGTCT
TCATTGTTGGGGGAGCAAATCCAAACAGAAGCTTCTCAGACGTGCACACCATGGATCTGGGAAAACACCAGTGGG
ACTTAGATACCTGCAAGGGCCTCTTGCCCCGGTATGAACATGCTAGCTTCATTCCCTCCTGCACACCTGACCGTA
TTTGGGTATTTGGAGGTGCCAACCAATCAGGAAATCGAAATTGTCTACAAGTCCTGAATCCTGAAACCAGGACGT
GGACCACGCCAGAAGTGACCAGCCCCCACCATCCCCAAGAACATTCCACACATCATCGGCAGCCATTGGAAACC
AGCTATATGTCTTTGGGGGTGGAGAGAGAGGTGCCAGCCGTGCAGGACACGAAGCTGCATGTGTTTGACGCAA
ACACTCTGACCTGGTCACAGCCAGAGACACTTGGAATCCTCCATCTCCCCGGCATGGTCATGTGATGGTGGCAG
CAGGGACAAAGCTCTTCATCCACGGAGGCTTGGCGGGGGACAGATTCTATGATGACCTCCACTGCATTGATATAA
GTGACATGAAATGGCAGAAGCTAAATCCCACTGGGGCTGCTCCAGCAGGCTGTGCTGCCCCACTCAGCTGTGGCCA
TGGGAAAACATGTGTACATCTTTGGTGGAATGACTCCTGCAGGAGCACTGGACACAATGTACCAGTATCACACAG
AAGAGCAGCATTGGACCTTGCTTAAATTTGATACTCTTCTACCCCTGGACGATTGGACCATTCCATGTGTATCA
TTCCATGGCCAGTGACGTGTGCTTCTGAGAAAGAAGATTCCAACCTCTCTCACTCTGAACCATGAAGCTGAGAAAG
AGGATTCAAGTTGACAAAGTAATGAGCCACAGTGGTGACTCACATGAGGAAAGCCAGACTGCTACACTGCTCTGTT
TGGTGTGTTGGTGGGATGAATACAGAAGGGGAAATCTATGACGATTGTATTGTGACTGTAGTGGACTTAATAAAACC
CACATTTTATTAAAAA

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FIGURE 2793

MKQLPVLEPGDKPRKATWYTLTVPGDSPCARVGHSCSYLPPVGNARGKVFIVGGANPNRSFSDVHTMDLGKHQW
DLDTCKGLLPRIEYHASFIPSCTPDRIWVFGGANQSGNRNCLQVLNPETRTWTTPEVTSPPPSPRTFHTSSAAIGN
QLYVFGGGERGAQPVDTKLHVFDANTLTWSQPETLGNPPSPRHGHVMVAAGTKLFIHGGLAGDRFYDDLHCIDI
SDMKWQKLNPTGAAPAGCAAHSAMGKHVYIFGGMTPAGALDTMYQYHTEEQHWTLKFDTLPPGRDLHSMCI
IPWPVTCASEKEDSNSLTNLNEAEKEDSVDKVMHSGDSHEESQTATLLCLVFGGMNTEGEIYDDCIVTVVD

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FIGURE 2794

CTTCCTCTTTCCCTCGGAGCGGGCGGGCGGCGTTGGCGGCTTGTGCAGCAATGGCCAAGATCAAGGCTCGAGATCT
TCGCGGGAAGAAGAAGGAGGAGCTGCTGAAACAGCTGGACGACCTGAAGGTGGAGCTGTCCCAGCTGCGCGTCGC
CAAAGTGACAGGCGGTGCGGCCTCCAAGCTCTCTAAGATCCGAGTCGTCCGGAAATCCATTGCCCCGTGTTCTCAC
AGTTATTAACCAGACTCAGAAAGAAAACCTCAGGAAATTCTACAAGGGCAAGAAGTACAAGCCCCCTGGACCTGCG
GCCTAAGAAGACACGTGCCATGCGCCGCCGGCTCAACAAGCACGAGGAGAACCTGAAGACCAAGAAGCAGCAGCG
GAAGGAGCGGCTGTACCCGCTGCGGAAGTACGCGGTCAAGGCCTGAGGGGCGCATTGTCAATAAAGCACAGCTGG
CTGAG

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FIGURE 2795

MAKIKARDLRGKKKEELLKQLDDLKVELSQLRVAKVTGGAASKLSKIRVVRKSIARVLTVINQTOKENLRKFYKG
KKYKPLDLRPKKTRAMRRRLNKHEENLTKKKQQRKERLYPLRKYAVKA

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FIGURE 2796

GCCGTGTCGCCACCATGGCTCCGCACCGCCCCGCGCCCGCGCTGCTTTGCGCGCTGTCCCTGGCGCTGTGCGCGC
TGTCGCTGCCCCGTCCGCGCGGCCACTGCGTCGCGGGGGCGTCCCAGGCGGGGGCGCCCCAGGGGCGGGTGCCCCG
AGGCGCGGCCAACAGCATGGTGGTGGAAACACCCGAGTTTCTCAAGGCAGGGAAGGAGCCTGGCCTGCAGATCT
GGCGTGTGGAGAAGTTTCATCTGGTGGCGTGGCCACCAACCTTTATGGAGACTTCTTACGGGCGACGCCTACG
TCATCCTGAAGACAGTGCAGCTGAGGAACGGAATCTGCAGTATGACCTCCACTACTGGCTGGGCAATGAGTGCA
GCCAGGATGAGAGCGGGCGGCCGCCATCTTTACCGTGCAGCTGGATGACTACCTGAACGGCCGGGCCGTGCAGC
ACCGTGAGGTCCAGGGCTTCGAGTCGGCCACCTTCCTAGGCTACTTCAAGTCTGGCCTGAAGTACAAGAAAGGAG
GTGTGGCATCAGGATTCAAGCACGTGGTACCCAACGAGGTGGTGGTGCAGAGACTCTTCCAGGTCAAAGGGCGGC
GTGTGGTCCGTGCCACCGAGGTACCTGTGTCTGGGAGAGCTTCAACAATGGCGACTGCTTCATCCTGGACCTGG
GCAACAACATCCACAGTGGTGTGGTTCCAACAGCAATCGGTATGAAAGACTGAAGGCCACACAGGTGTCCAAGG
GCATCCGGGACAACGAGCGGAGTGGCCGGGCCCCGAGTGCAGTGTCTGAGGAGGGCACTGAGCCCGAGGCGATGC
TCCAGGTGCTGGGCCCCAAGCCGGCTCTGCCTGCAGGTACCGAGGACACCGCCAAGGAGGATGCGGCCAACCGCA
AGCTGGCCAAGCTCTACAAGGTCTCCAATGGTGCAGGGACCATGTCCGTCTCCCTCGTGGCTGATGAGAACCCCT
TCGCCCCAGGGGGCCCTGAAGTCAGAGGACTGCTTCATCCTGGACCACGGCAAAGATGGGAAAATCTTTGTCTGGA
AAGGCAAGCAGGCAAACACGGAGGAGAGGAAGGCTGCCCTCAAAACAGCCTCTGACTTCATCACCAAGATGGACT
ACCCCAAGCAGACTCAGGTCTCGGTCTTCTGAGGGCGGTGAGACCCCACTGTTCAAGCAGTCTTCAAGAACT
GGCGGGACCCAGACCAGACAGATGGCCTGGGCTTGTCTACCTTTCCAGCCATATCGCCAACGTGGAGCGGGTGC
CCTTCGACGCCGCCACCCTGCACACCTCCACTGCCATGGCCGCCCAGCACGGCATGGATGACGATGGCACAGGCC
AGAAACAGATCTGGAGAATCGAAGGTTCCAACAAGGTGCCCGTGGACCCTGCCACATATGGACAGTTCTATGGAG
GCGACAGCTACATCATTCTGTACAACCTACCGCCATGGTGGCCGCCAGGGGCAGATAATCTATAACTGGCAGGGTG
CCCAGTCTACCCAGGATGAGGTGCTGCACTGCCATCCTGACTGCTCAGCTGGATGAGGAGCTGGGAGGTACCC
CTGTCCAGAGCCGTGTGGTCCAAGGCAAGGAGCCCCGCCACCTCATGAGCCTGTTTGGTGGGAAGCCCCATGATCA
TCTACAAGGGCGGCACCTCCC GCGAGGGCGGGCAGACAGCCCCTGCCAGCACCCGCCTCTTCCAGGTCCGCGCCA
ACAGCGCTGGAGCCACCCGGGCTGTTGAGGTATTGCCTAAGGCTGGTGCCTGAACCTCAACGATGCCCTTTGTTT
TGAAAACCCCTCAGCCGCCTACCTGTGGGTGGGTACAGGAGCCAGCGAGGCAGAGAAGACGGGGGCCAGGAGC
TGCTCAGGGTGTGCGGGGCCAACCTGTGCAGGTGGCAGAAGGCAGCGAGCCAGATGGCTTCTGGGAGGCCCTGG
GCGGGAAGGCTGCCTACCGCACATCCCCACGGCTGAAGGACAAGAAGATGGATGCCATCCTCCTCGCCTCTTTG
CCTGCTCCAACAAGATTGGACGTTTTGTGATCGAAGAGGTTCTGGTGAGCTCATGCAGGAAGACCTGGCAACGG
ATGACGTGATGCTTCTGGACACCTGGGACCAGGTCTTTGTCTGGGTGGAAAGGATTCTCAAGAAGAAGAAAAGA
CAGAAGCCTTGACTTCTGCTAAGCGGTACATCGAGACGGACCCAGCCAATCGGGATCGGCGGACGCCCATCACCG
TGGTGAAGCAAGGCTTTGAGCCTCCCTCCTTTGTGGGCTGGTTCCTTGGCTGGGATGATGATTACTGGTCTGTGG
ACCCCTTGAGACAGGGCCATGGCTGAGCTGGCTGCCTGAGGAGGGGCAGGGCCACCCATGTCACCGGTGAGTGCC
TTTTGGAAGTGTCTTCCCTCAAAGAGGCCTTAGAGCGAGCAGAGCAGCTCTGCTATGAGTGTGTGTGTGTGT
GTGTTGTTTCTTTTTTTTTTTTACAGTATCAAAAATAGCCCTGCAAAAATTCAGAGTCTTGCAAAAATGTC
TAAAATGTCAGTGTGTTGGGAAATTAAATCCAATAAAAACATTTTGAAGTGTG

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FIGURE 2797

MAPHRPAPALLCALSLALCALSLPVRAATASRGASQAGAPQGRVPEARPNMVEHPEFLKAGKEPGLQIWRVEK
FDLVPVPTNLYGDFFTGDAYVILKTVQLRNGNLQYDLHYWLGNECSQDESGAAAIFTVQLDDYLNGRAVQHREVO
GFESATFLGYFKSGLKYYKGGVASGFKHVVPNEVVQRLFQVKGRRVVRATEVPVSWESFNNGDCFILDLGNNIH
QWCGSNSNRYERLKATQVSKGIRDNERSGRARVHVSEEGTEPEAMLQVLGPKPALPAGTEDTAKEDAANRKLAKL
YKVSNGAGTMSVSLVADENPFAQGALKSEDCFILDHGKDGKIFVWKGKQANTEERKAALKTASDFITKMDYPKQT
QVSVLPEGGETPLFKQFFKNWRDPDQTDGLGLSYLSSHIANVERVPFDAATLHTSTAMAAQHGMDDDGTTGQKQIW
RIEGSNKVPVDPATYGGFYGGDSYIILYNYRHGGRQGGIINWQGAQSTQDEVAASAILTAQLDEELGGTPVQSR
VVQGKEPAHLMSLFGGKPMIYKGGTSREGGQTAPASTRLFQVRANSAGATRAVEVLPKAGALNSNDAFVLKTPS
AAYLWVG TGASEAEKTGAQELLRLRAQPVQVAEGSEPDGFWEALGGKAAYRTSPRLKDKKMDAHPPLFACSNK
IGRFVIEEVPGELMQEDLATDDVMLLDTWDQVFVWVGKDSQEEKEALTSAKRYIETDPANRDRRTPITVVKQG
FEPPSFVGVFLGWDDDYWSVDPLDRAMAELAA

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FIGURE 2798A

GTTTAGTATTTTTGAGAACCCAGCCACCTGGCCATGCTGTACCAGCCTTGTGCTGAGTGCTGGGGATAAAGGAAC
AAATAAAACCCAGTCCAGGCTTCTGTGTGCCAGCCCTGTGCCGGGTCCCAGTGGGTAACAGCATGTCCAATCCC
CTCAGTGTCCCACTAGAGGCTTCTTTGGGGCTGCTGGGGACATCTTGTTCCTAGTTGAGAATTGAGATTTATGT
CCAAAGACAAGAATCCCTGAGGGGCAGATTACAACATGGACTGGGCCATTACAATCAACAAGGACACAAAGCTA
ACACAGCCATCGTTATACACCAGACATGTGCTAAGGACTTGATTTCCCATTTGTTTAAATCATCACCACCTCCATT
ATCACCCCCATTTACAGATGTGGAACCTGAGGCTGAGAAGAGTAAGGGACTTGTCCAAGGGCAGAGCAAGTC
AGGGCTACGGTGATGTTTTAGGGCCAGACCTGTTTGCTCTGGAGCCCAGGGTTTAAACACACCCAGTGCTGCTG
TGAAAGGGCTCTGGACAGCTCAGGCTGGCCGGCCAATTCGGGGATAACCGAACAGAGGTATGGAACAGAAAGGGG
CGTTGAGGATGTTGCTGTGTGTGTGCGGTGGGGGGAGTGACAAGGCTTCAGCAATGGTACTCATTCTCTCCAACC
AGCTCCCAGTGCTGCTGTCTCTGATCCACCCTCCGCTCTGCCTGCCATGGACTAATTGTTCTGAAATCCCATGG
ATCAAGTCACTCCTCAGCTGAGGACCTGTCCATGGCTCCCTGGTACCCAGAGGATAGAAACCCAGCATTCAAAAC
CTCTCTAACAGCTCCCCACCTCAACCCTCACACTCCTGCTCACTAGCCCCAGGCGCAGTGGGCTCTTCCAGCG
GCCAAGCCTGTGCCTACGGTGCCTTCTTGCTGGAATGCCCAACTCCCCCTTCTCAGCCTTCTTTGACTCTCAAG
TAAGGAAAAGCACTCTTTGTCTCCCTGAGCCCCCTTGGCACTTATCACAGAGCACTCTGGGCGTTAACTTCCACTG
TCTCCGTCTTGATTAGAGTGGATCTCAGAGGGCCCCGGTGGTGTCTGCTTCACCTCCCTCTCCACTGCAGCAGCT
TAGCAAGGACTGGCCGGGTAACTAAAAAATGCAAAGAGCTGAGAGAATCTGGGAAAGTGACATTTCCAGGA
CTGCCCAATGACAAGCCCCGTACCAAGGCACAGCATCAGGATACCCTGATGTGGAAGAACCAAAATTCACCCCT
CATGGCTTATCAGGATGGTCCCTTGTGTCTGTCCCTTTCAAGGGTTCTGATAATGAAATCTGGGCAAGTCACCCCTC
CTGCTTTAAACTTTCAATGGTTCCAGAGGTCTAGCATAAAATCCAACTCAAGGGCCCACATAACCTAGGTGC
TGCTTGCCCCCAGGCCCTCCTCTTGCCACGCCCCCTCCCTGGCCAGCCTCCCTCACTTCTTTAGTTTCTCAA
GGACTCCCCCTCACTAAAGCCTTACCCAGGTGCCTCTCTGCCTAGGGGGCTCCTCCATTCCCTGCTCACTCAGC
CACCTCCCTCTCCCTCTTCAGGTCTCACTTTTTAGGGGAGGCTTCCCTGATCTGTCCAGATAAGACCTCACCCT
CCCACCAATCCCAAACGCTCCCATACCTGATCGTTTTCTTTCACAGCAAGAATTAATCTTCAGTGTAATAATG
ATCTACTGAAGACCTATGAGGAATGGGAAAGTCTTGTTTTTTGTGATTCTTCAACACCCAGCTCAGAGCCTAAA
TATCTCTCAAATGAATGAATATATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGAATGA
AAGACAAGAAGGTGGGCAGAATCCTAGGGAACACTGAGGCAGGAAAAGCAGGGCCCTGGGGCAGGCGTCATGGCT
CACACCTGTAATCCAGCACTTTGGGAGGCCAAGGCAGGCAGATCACTTGAGGTCAGGACTTTGAGACCAGCCTG
GCCAATGTTGTAACCCCTGTCTCTACTAAAAACACAAACATTAGCCGGGTATGGTGGCACATGCCTGTAGTCCC
AGCTACTCAAGAGGCTGAGGCAGGAGAATCACTTGTACCTGGGAGGAGGAGGTTGCAGTGAGCTGAGATCGTGCC
ACTGCACTCCAGCCTGGGCACCAACAGCAAGACTCCGTCTAAAAAAAAAAAAAAAAAGAAAAAGAAAGAAAGAA
AAAGAAAAACAGGGCCCTAACTAAAAAAGACAGGAGGAAAAACAGGGCCCTAACTAAAAAGAGAGGAGGGGCCCT
AACTGAAAAAACAGGGCCCTAACTAAAAAAGTCAGGAGGAAAAACAGGGCCCTAACTAAAAAGAGAAGAGGAAA
TAAACCAGACAGTGACGCTCCCAAGCAAAAGGAGGGAGTTTCTGGAATGCACTAGAGACTGGCACATGGAG
TCTTGAGGAAAAGAGCACTGGATTGGACATCGAGGAGGTCACTGGGGCCTCCCTGATTGAACCAAGGTTCCGTGGA
GGTGGGCACAGGGCTGGTACATTGCAGGGGGCAGAGGAGTAAAGAGGGATGAATAAGCAAAGCTCTCAGGCGACG
GTTGCTCAGCTGGGTCTATGCCAGCCTGGCCCTGCAGGGTCTGCGGAAGACAGGGCCCCCTGTGTCTATAGTACCA
AAAGCATCAACAGAGCATAACATTCTTTTTGTTGACAGATTACATTGAGGCAACTTGGCTTTTGGAGTTATCAGG
GCTCAGTCTCAAAGGCAGATGCATCAGAGCCAAGACCCGGCCCTCAAGTCTCTCTATTAGGGCAGCACTAGGGCT
ACCTCTTTGTGACAGAACCTTTGGATAGCCGCTGATGGGGTGAGTCAGCTTTCTGGGCCCGGCAGACCTTTTGG
GAATCCCTGGCTTTTGGGGCACAACATCCTGGGGACCACCAAAAAGCCCTTTACCTGAGCTTTGGGAAAGAGGA
ACAGCTCCGGCTGTGGGTGGCTCATGTACCATCTGGAAGCCAGCTGGGCCACAGCAGACGCGTAAGTCTGTAT
TCATTATCCCTTCTCTTTTGGCAGAAAAGGGATGGCGTGGGTGGAGGGGTGTTTTCTGGGTCTTTGCACA
ATTGCTCATTAGAAATCACTTCTGTTTGGGTGTTGGAAGCTGGGCGATTCCCCCTAGTAGTGATCCTTCTGTG
TCACTGGTCACAAAGCCCTTTGGCATCTACAAGCTCGTTGGGTCCACACAGCAGCTTTGTTAGGTGGGTAGGGG
AGACCAAGGCACCCATCCTACAGGTGGAGAAACCGAGGCTGAAGCTGGGAGGTGAGCCAGTCTCTGGCTTCCAG
CCCAGGACTCTGCACTCTCCCCCACCTCCCCACCTACTTCAGCAGGTCACTGTGAATCTGATAGTCAGGTGG
GCCCCACCTGCCAGCTGGCCCCAGCGGGCATGACTCATCCGCTTCCCCATGACTCACACACCTCAGGTGCTCCT
CCTCTGGTCAACAAGTCCAGAGACTTGGCAAATGGACCCCCATTTTTCTACCTCTCCAAGCCTCTGGGAAGAA

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FIGURE 2798B

TTCTGACCTCCTCTTTATGGGGACTCTGCTCTTCTACAGAATAGCAACCAAGGCCTTGAGAGGGAAAAGCAACT
CTCCTAAAGTCACATAGCAAGCAACCAGCACAGCCAGGGTGGGAGCCAGGCATCCGGGCACCGAGCCCAGTCCCG
GCCTCCTCCCTACAAGATCACTCTCGCCTGACCTCCCTCTCAAGGACAGGAAAGGAGCAGAGACGCACTCTGAGC
CTTATTAGGAAGACCTCAGGGACTCCCCTGAATCCACTGTGGCTACAGCGGCTGCTTCCACCACTGAAGTCCCC
TCCAGGCTTCCCTGGGCAGCCAGGGCGGGGTTTAAGAGGACGACAGGTGTCTGTATTGCTCTACCTACCTAACAA
GGCTGTGCAGGGTGAAGAGTGCTGCTCCGTGGGAAGGCGCTGGGACCAAGGCCGAAGCACTGGACAAAGAGAGCT
ATGAGCACTACCTGTAAACAAAGGGCACAAGAATGTCAGCCTCAGGGGGAGTTCAAGGTCATCTGGTCAAATCCCC
ATTTGATGTTTCAACCCCTTTCTCCCTCCACCAGGGGTCACACAATCAGTACTTGCACACATCCAGCAACACC
GCACTCACTACCTGCCAAGGCTGCAAGACCTGCTGCTGGAGGGTTTGGCTGCGTAAAAGAATTGTCCTAAGGATG
CACTAAATCTCTCTCTTCTTATGCCTTGCTGCTGGTATTAGCTCTGCCTCCTTTTGGGTCAGCCAGAACAG
GTCTGTCCCCCTCTTTCTGATGGCTCTTTGGAGATTTGAAGACAGTGATCCTGGGCCCTCAAGTCTTCTACAA
ATTGTGCACCCCTTTCTCCAGCTCTTCTGAGACCAGGGTTTCCGGTTCGCTCACCTGTTCCCTGATCTGCT
CCAGATGAAACCTGTCCCTACTGACAGCACAAGACCCAGAATTAGACAATCAGTCAAGCTCTATCCAGGACAGGG
CAAGCAGGACTCTCACCTCCTTCATTAGAGATATCATGCTTCTATTAATTGAGCCTAAAATCCCATTTGCATTTA
AGGCAGCCCTATTGCATGGCTGAATTGAGTTTACAGTCAACTTCAGAGCTGTACGTTAGTACTCTGAAGTTATAT
AAACTGGGCCCTCACTTAACTGTGTAACCTTGAGCAAGC

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FIGURE 2799

AGGATGGCAATGCCAGTGGGAACCACGCTGCTTGAGGCTCTGGACTGCATCCTACCACCAACTCGCCCAACTGACA
AGCCCTTGCGCCTGCCTCTCCAGGATGTCTACAAAATTGGTGGTATTGGTACTGTTCTGTTGGCCGAGTGGAGA
CTGGTGTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTACAACGGAAGTAAAACTGTGCGAAA
TGCACCATGAAGCTTTGAGTGAAGCTCTTCCTGGGGACAATGTGGGCTTCAAGGTCAAGAATGTGTCTGTCAAGG
ATGTTTCGTCGTGGCAACGTTGCTGGTGACAGCAAAAATGACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAGG
TGATTATCCTGAACCATCCAGGCCAAATAAGCGCCGGCTATGCCCCTGTATTGGATTGCCACATGGCTCACATTG
CATGCAAGTTTGCTGAGCTGAAGGAAAATGGCAAGGTCACCAAGTCTGCCCAGAAAGCTCAGAAGGCTAAATGAA
TATTATCCCTAATACCTGCCACCCCACTCTTAATC

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FIGURE 2800

GTTTGCCGCCAGAACACAGGTGTCGTGAAAACCTACCCCTAAAAGCCAAAATGGGAAAGGAAAAGACTCATATCAA
CATTGTCGTCATTGGACACGTAGATTCGGGCAAGTCCACCACTACTGGCCATCTGATCTATAAATGCGGTGGCAT
CGACAAAAGACCATCCAGGCCAAATAAGCGCCGGCTATGCCCCGTGATTGGATTGCCACATGGCTCACATTGCAT
GCAAGTTTGCTGAGCTGAAGGAAAAGATTGATCGCCGTTCTGGTAAAAAGCTGGAAGATGGCCCTAAATTCTTGA
AGTCTGGTGATGCTGCCATTGTTGATATGGTTCCTGGCAAGCCCATGTGTGTTGAGAGCTTCTCAGACTATCCAC
CTTTGGGTCGCTTTGCTGTTTCGTGATATGAGACAGACAGTTGCGGTGGGTGTCATCAAAGCAGTGGACAAGAAGG
CTGCTGGAGCTGGCAAGGTCACCAAGTCTGCCAGAAAGCTCAGAAGGCTAAATGA

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FIGURE 2801

GCCAAAATGGGAAAGGAAAAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTCTGGGCAAGTCCACCACT
ACTGGCCATCTGATCTATAAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCTGCTGAG
ATGGGAAAGGGCTCCTTCAAGTATGCCTGGGTCTTGGATAAACTGAAAGCTGAGCGTGAACTGGTATCACCATT
GATATCTCCTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGAGACTTC
ATCAAAAACATGATTACAGGGACATCTCAGGCTGACTGTGCTGTCCTGATTGTTGCTGCTGGTGTGGAATTT
GAAGCTGGTATCTCCAAGAATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAATA
ATTGTCGGTGTTAACAAAATGGATTCCACTGAGCCACCCTACAGCCAGAAGAGATATGAGGAAATTGTTAAGGAA
GTCAGCACTTACATTAAGAAAATTGGCTACAACCCCGACACAGTAGCATTGTTGCCAAATTCCTGAAGTCTGGTG
ATGCTGCCATTGTTGATATGGTTCCTGGCAAGCCCATGTGTGTTGAGAGCTTCTCAGACTATCCACCTTTGGGTC
GCTTTGCTGTTTCGTGATATGAGACAGACAGTTGCGGTGGGTGTC

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FIGURE 2802

AAATTGTTAAGGAAGTCAGCACTTACATTAAGAAAATTGGCTACAACCCCGACACAGTAGCATTTGTGCCAATTT
CTGGTTGGAATGGTGACAACATGCTGGAGCCAAGTGCTAACATGCCTTGGTTCAAGGGATGGAAAAGTCACCCGTA
AGGATGGCAATGCCAGTGGAACACGCTGCTTGAGGCTCTGGACTGCATCCTACCACCAACTCGCCCAACTGACA
AGCCCTTGCGCCTGCCTCTCCAGGATGTCTACAAAATTGGTGGTATTGGTACTGTTCTGTTGGCCGAGTGGAGA
CTGGTGTTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTACAACGGAAGTAAAATCTGTGCGAAA
TGCACCATGAAGCTTTGAGTGAAGCTCTTCCTGGGGACAATGTGGGCTTCAAGGTCAAGAATGTGTCTGTCAAGG
ATGTTTCGTCGTGGCAACGTTGCTGGTGACAGCAAAAATGACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAGG
TGATTATCCTGAACCATCCAGGCCAAATAAGCGCCGGCTATGCCCCGTATTGGATTGCCACATGGCTCACATTG
CATGCAAGTTTGCTGAGCTGAAGGAAAAGATTGATCGCCGTTCTGGTAAAAAGCTGGAAGATGGCCCTAACCACC
TTTGGGTCGCTTTGCTGTTTCGTGATATGAGACAGACAGTTGCGGTGGG

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FIGURE 2803

CTTTTTCGCAACGGGTTTGCCGCCAGAACACAGGTGTCGTGAAAACTACCCCTAAAAGCCAAAATGGGAAAGGAA
AAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTCGGGCAAGTCCACCCTACTGGCCATCTGATCTAT
AAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCTGCTGAGATGGGAAAGGGCTCCTTC
AAGTATGCCTGGGTCTTGATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATTGATATCTCCTTGTGGAAA
TTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGAGACTTCATCAAAAACATGATTACA
GGGACATCTCAGGCTGACTGTGCTGTCTGATTGTTGCTGCTGGTGTGGTGAATTTGAAGCTGGTATCTCCAAG
AATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAACATAATTGTCGGTGTTAACAAA
ATGGATTCCACTGAGACCATCCAGGCCAAATAAGCGCCGGCTATGCCCTGTATTGGATTGCCACATGGCTCACA
TTGCATGCAAGTTTGCTGAGCTGAAGGAAAAGATTGATC

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FIGURE 2804

CTAAAAGCCAAAATGGGAAAGGAAAAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTTCGGGCAAGTCC
ACCCTACTGGCCATCTGATCTATAAATGCGGTGGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCT
GCTGAGATGGGAAAGGGCTCCTTCAAGTATGCCTGGGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATC
ACCATTGATATCTCCTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGA
GACTTCATCAAAAACATGATTACAGGGACATCTCAGGCTGACTGTGCTGTCCTGATTGTTGCTGCTGGTGTGGT
GAATTTGAAGCTGGTATCTCCAAGAATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAA
CACTAATTGTCGGTGTTAACAAAATGGATTCCACTGAGCCACCCTACAGCCAGAAGAGATATGAGGAACTACA
AAATTGGTGGTATTGGTACTGTTCTGTTGGCCGAGTGGAGACTGGTGTCTCAAACCCGGTATGGTGGTCACCT
TTGCTCCAGTCAACGTTACAACGGAAGTAAATCTGTGCGAAATGCACCATGAAGCTTTGAGTGAAGCTCTTCCTG
GGGACAATGTGG

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FIGURE 2805

MGKEKTHINIVVIGHVDSGKSTTTGHLIYKCSSIDKRTIEKFEKETAEMGKGSFKYGWLDKLKAERERGITIDI
SLWKFETSKYYVTITDAPGHRDFIKNMITGTSQADCAVPIVAAGVGEFEAGISKNGQTREHALLAYTLGVKQLIV
GVNKMDSTEPYPYSQKRYEEIVKLVLVVFLLAEWRLVFSPVWWSPLLQSTLQOK

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FIGURE 2806

ATGGCCCAACAAGCAAATGTCGGGGAGCTTCTTGCCATGCTGGACTCCCCCATGCTGGGTGTGCGGGACGACGTG
ACAGCTGTCTTTAAAGAGAACCTCAATTCTGACCGTGGCCCTATGCTTGTAACACCTTGGTGGATTATTACCTG
GAAACCAGCTCTCAGCCGGCATTGCACATCCTGACCACCTTGCAAGAGCCACATGACAAGCACCTCTTGGACAGG
ATTAACGAATATGTGGGCAAAGCGCCACTCGTTTATCCATCCTCTCGTTACTGGGTCTATGTCATAAGACTGCAG
CCATCTTGAAGCATAAGCTCTCTCAAGCACCTCTTTTGCCCTCTTTACTAAAATGTCTCAAGATGGACACTGAC
GTCGTTGTCTCACAACAGGCGTCTTGGTGTGATAACCATGTACCAATGATTCCACAGTCTGGGAAACAGCAT
CTTCTTGATTTCTTTGACATTTTGGCCGCTGTGTCATCATGGTGCCTGAAGAAACCAGGCCACGTGGCGGAAGTC
TATCTCGTCCATCTCCATGCCAGTGTGTACGCACTCTTTCATCGCCTTTATGGAATGTACCCTTGCAACTTCGTC
TCCTTTTGGCTTCTCATTACAGTATGAAAGAAAACCTGGAGACTTTTGAAGAAGTGGTCAAGCCAATGATGGAG
CATGTGCGAATTCATCCGAATTAGTGAAGTGGATCCAAGGACCATGAACTGGACCCTCGAAGGTGGAAGAGATTA
GAAACTCATGATGTTGTGATCGAGTGTGCCAAAATCTCTGGATCCCAAGAGCCTCATATGAAGATGGCTAT
TCTGTGTCTACCAAATCTCAGCCCGCTTCTCTCATCGTTCAGCCGATGTCACCACCAGCCCTTATGCTGACACA
CAGAATAGCTATGGGTGTGCTACTTCTACCCCTTACTCCACGCTCTCGGCTGATGTTGTTAAATATGCCAGGGCAG
CTACCTCAGACTCTGAGTTCCCATCGACACGGCTGATAACTGAACCACCACAAGCTACTCTTTGGAGCCCCTCT
ATGGTTTGTGGTATGACCACTCCTCCAATCTCTCTGGAATGTCCACCTGATCTGTACACCCCTTACAGTAAA
GTCTTTGGTACAACCTGCAGGTGGAAGGAACCTCTCTGGGAACCCAGCAACCTCTCTCTCCAGCCCCACTC
TGTCATTGGATGACTACGTGCACATTTCACTCCCCAGGCCACAGTCACACCCCCAGGAAGGAAGAGAGAATG
GATTCTGCAAGACCATGTCTACACAGACAACACCATCTTCTGAATGACAGAGGATCAGAAGAGCCACCTGGCAGC
AAAGGTTCTGTCACTCTAAGTGATCTTCCAGGGTTTTTAGGTGATCTGGCCTCTGAAGAAGATAGTATTGAAAAA
GATAAAGAAGAAGCTGCAATATCTAGAGAACTTTCTGAGATCACCACAGCAGAGGCAGAGCCTGTGGTTCTCTCGA
GGAGGCTTTGACTCTCCCTTTTACCGAGACAGTCTCCAGGTTCTCAGCGGAAGACCCACTCGGCAGCCTCCAGT
TCTCAGGGCGCCAGCGTGAACCCTGAGCCTTTACACTCCTCCCTGGACAAGCTTGGGCTGACACACCAAAGCAA
GCCTTTACTCCCATAGACCTGCCCTGCGGCAGTGTGATGAAAGCCTTGGGGAGACAGGGAATGCCAGACTTCT
TTGGAGACCAGTATCTTCACTCCCAGTCTTGTAAAATTCCACCTCCGACGAGAGTGGGCTTTGGAAGCGGGCAG
CCTCCCCCGTATGATCATCTTTTGGAGGTGGCATTGCCAAAGACAGCCCATCATTGTGTCATCAGGAAGACTGAG
GAGCTGTTAAAGAAAGCAAAGGAACACAGAGGAAGATGGTGTGCCCTCTACCTCCCCAATGGAAGTGCTGGAC
AGACTGATACAGCAGGGAGCAGACGCGCACAGCAAGGAGCTGAACAAGTTGCCCTTACCCAGCAAGTCTGTGCGAC
TGGACCCACTTTGGAGGCTCTCCTCCTTCAGATGAGATCCGCACCCCTCCGAGACCAGTTGCTTTTACTGCACAAC
CAGTTACTCTATGAGCGTTTTAAGAGGCAGCAGCATGCCCTCCGGAACAGGCGGCTCCTCCGCAAGGTGATCAAA
GCAGCAGCTCTGGAGGAACATAATGCTGCCATGAAAGATCAGTTGAAGTTACAAGAGAAGGACATCCAGATGTGG
AAGGTTAGTCTGCAGAAAGAACAAGCTAGATACAATCAGCTCCAGGAGCAGCGTGACACTATGGTAACCAAGCTC
CACAGCCAGATCAGACAGCTGCAGCATGACCGAGAGGAATTCTACAACCAGAGCCAGGAATTACAGACGAAGCTG
GAGGACTGCAGGAACATGATTGCGGAGCTGCGGATAGAAGTGAAGAAGGCCAACAAACAGGTGTGTCACTGAG
CTGCTGCTCAGTCAGGTTTCCCAAAGCTCTCAAACAGTGAGTCGGTCCAGCAGCAGATGGAGTTCTTGAACAGG
CAGCTGTTGGTTCTTGGGGAGGTCAACGAGCTCTATTTGGAACAACTGCAGAACAAAGCACTCAGATACCACAAAG
GAAGTAGAAATGATGAAAGCCGCTATCGGAAAGAGCTAGAAAAAACAGAAGCCATGTTCTCCAGCAGACTCAG
AGGCTTGATACCTCCCCAAAACGGATTTTGGAACTGGAATCTCACCTGGCCAAGAAAGACCACCTTCTTTTGGAA
CAGAAGAAATATCTAGAGGATGTCAAACCTCCAGGCAAGAGGACAGCTGCAGGCCGAGAGAGCAGGTATGAGGCT
CAGAAAAGGATAACCCAGGTGTTTGAATTGGAGATCTTAGATTTATATGGCAGGTTGGAGAAAGATGGCCTCCTG
AAAAAAGTTGAAGAAGAAAAAGCAGAAGCAGCTGAAGCAGCAGAAGAAAGGCTTGACTGTTGTAATGACGGGTGC
TCAGATTCCATGGTAGGGCACAATGAAGAGGCATCTGGCCACAACGGTGAGACCAAGACCCCCAGGCCAGCAGC
GCCCGGGGCAGTAGTGGAAGCAGAGGTGGTGGAGGCAGCAGCAGCAGCAGCAGCGAGCTTCTACCCAGAGAAA
CCCCACACCAGAGGGCAGGCCCATTCAGCAGTGGTGGGAGACGACTATGGGAGAAGCGTCTGCCAGCATCCCC
ACCACTGTGGGCTCACTTCCAGTTCAAAAAGCTTCTGGGTATGAAGGCTCGAGAGTTATTCGTAATAAGAGC
GAGAGCCAGTGTGATGAGGACGGCATGACCAGTAGCCTTCTGAGAGCCTAAAGACAGAAGTGGGCAAAGACTTG
GGTGTGGAAGCCAAGATTCCCTGAACCTAGATGGCCTCACCCGCTCTCCCCGACCCCGGACAGTGTGGACAG
CTACATATCATGGACTACAATGAGACTCATCATGAACACAGCTAA

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FIGURE 2807

MAQQANVGELLAMLDS PMLGVRDDVTAVFKENLNSDRGPM LVNTLV DYYLETSSQPALHILTTLQEPHDKHLLDR
INEYVGKAATRLSILSLLGHVIRLQPSWKHKLSQAPLLPSLLKCLKMDTDVVVLTTGVLVLITMLPMIPQSGKQH
LLDFFDIFGRLLSWCLKKPGHVAEVYLVHLHASVYALFHRLYGMYPCNFVSFLRSHYSMKENLETFEEVVKPMME
HVRIHPELVTGSKDHELDPRRWKRLETHDVVIECAKISLDPT EASYEDGYSVSHQISARFPHRSADVTTSPYADT
QNSYGCATSTPYSTRMLMLNMPGQLPQTLSSPSTRLITEPPQATLWSPSMVCGMTTPPTSPGNVPPDLSPYK
VFGTTAGGKGTPLGTPATSPPPAPLCHSDDYVHISLPQATVTPPRKEERMDSARPCLHRQHHLNDRGSEEPGGS
KGSVTLSDLPGLGLDLASEEDSIEKDKEEAISRELSEITTAEAEPVVPRGGFDSFFYRDSLPGSQRKTHSAASS
SQGASVNPEPLHSSLDKLGPDTPKQAFTPIDLPCGSADESPAGDRECQTSLETSTFTSPCKIPPTRVGFGSGQ
PPPYDHLFEVALPKTAHHFVIRKTEELLKKAKGNTEEDGVPSTSPMEVLDRLIQGADAHSKELNKLPLPSKSVD
WTHFGGSPPSDEIRTLRDQLLLHNQLLYERFKRQQHALNRRLLRKVIKAAALEEHNAAMKDQLKLEKDIQMW
KVS LQKEQARYNQLQEQRDTMVTKLHSQIRQLQHDREEFYNQSQELQTKLEDCRNMIAELRIELKKANNKVCHTE
LLLSQVSQKLSNSESVQQQMEFLNRQLLVLGEVNELYLEQLQNKHSDTTKEVEMMKAAAYRKELEKNRSHVLQQTQ
RLDTSQKRILELESHLAKKDHLLLEQKKYLEDVKLQARGQLQAAESRYEAQKRITQVFELEILDLYGRLEKDGLL
KKLEEEKAEAAEAAEERLDCCNDGCSDSMVGHNEEASGHNGETKTPRPSSARGSSGSRGGGGSSSSSELSTPEK
PPHQ RAGPFSSRWETTMGEASASIPTTVGSLPSSKSFLGMKARELFRNKSESQCDEDGMTSSLSES LKTEL GKDL
GVEAKIPLNLDGPHSPPTPDSVQLHIMDYNETHHEHS

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FIGURE 2808

GCTCCGGTTGCTCCGACCTCGGCGCTGGGCGGGCGCGCCGGGCTGGGGAAGGGGCGGGCGGGGACCCGATG
CGCGGGAGCGGAGGCCGAGATGGCTTCGGCGGGAGGCGAAGACTGCGAGAGCCCCGCGCCGGAGGCCGACCGTCC
GCACCAGCGGCCCTTCTGATAGGGGTGAGCGGCGGCACTGCCAGCGGGAAGTCGACCGTGTGTGAGAAGATCAT
GGAGTTGCTGGGACAGAACGAGGTGGAACAGCGGCAGCGGAAGGTGGTCATCCTGAGCCAGGACAGGTTCTACAA
GGTCCTGACGGCAGAGCAGAAGGCCAAGGCCCTTGAAGGACAGTACAATTTTGACCATCCAGATGCCTTTGATAA
TGATTTGATGCACAGGACTCTGAAGAATCATCGTGGAGGGCAAAACGGTGGAGGTGCCGACCTATGATTTTGTGAC
ACACTCAAGGTTACCAGAGACCACGGTGGTCTACCCTGCGGACGTGGTTCTGTTTGAGGGCATCTTGGTGTCTA
CAGCCAGGAGATCCGGGACATGTTCCACCTGCGCCTCTTCGTGGACACCGACTCCGACGTGAGGTGTCTCGAAG
AGTTCTCCGGGACGTGCGCCGAGGGAGGGACCTGGAGCAGATTCTGACGCAGTACACCACCTTCGTGAAGCCGGC
CTTCGAGGAGTTCTGCCTGCCGACAAAGAAGTATGCCGATGTGATCATCCCGCGAGGAGTGACAAATATGGTTGC
CATCAACCTGATCGTGCAGCACATCCAGGACATTCTGAATGGTGACATCTGCAAATGGCACCGAGGAGGGTCCAA
TGGGCGGAGCTACAAGCGGACCTTTTCTGAGCCAGGGGACCACCTGGGATGCTGACCTCTGGCAAACGGTCA
TTTGGAGTCCAGCAGCAGACCCACTGAGGGGCTGCCGAGCCTCAGGGCAGGTCTCCCGCCCGGCATGTGTGTT
AGGGACTGAGCCTGGGGACGCCCACCCACACCCACTGCTTCCTCTCGGCGCACCCAGGGGAGTGTTAGCAGCGA
GGCCTTCCTCACTCAGGAGTGGAACCTCAGATGTGTCACTCAGACTCAACTTGCTGGGACACTGACAGGCGTTCC
TGAGGTTTTAGCCACTTAGGCTCGTTGCGGTTTTAAAGATCCCTCTAGGTCACTGAGAAATGCCACAGAATGTGC
AGGAAGCCTGGGAGGCTTCTGTGAGGAATGTGAGGCACATTATGGGGAAATTGAGGAGACAGCCTAGACACTGG
CTGGCCTGATGTTTTGTTGACAGTGAACCCACAGTGGGAGAGAGTTTTTCCAGTCTGATCTGGTTCTTACACAC
TCACACACATAACTCAAAGTTTTGTGAACAAGTACTTTCCTTTTTTACATGTTACATGTCTCATGTTTTCTGT
TTTTGTTTTATAACACAAGGCTGGTTGTGGCCTACAAACCTAATTTTCATGACCCAGTGGTTTGCAGTCCAGCGT
GGCCTACACGGATATGGGGAGCCACTGAGGGATGTTTTCCCCCTTGCTTGTGCCTTAAAGGCAGAGAAGCGAGG
CGGATGCCCTGGAAGCACCCAGCATCACACCCAGGCTTGTGCGGGGCCAGGCTGGGAGCCCATGCAGTAGGGCAG
AAGGCAGCGGAGGCCAGGTCTGTCCCGGCTGGAGAACAGCGTCCACGCAGTCCCTGCCCTGGGGTCAGGCCCTCACT
GACCCTCAGGGGAGCCCCAAGGTGCTGTCTGTCTAGACAGGCTGTCCACCCAGGGTGGCTAGTGGCCATATG
CAGGGAATGGTGCTTCTGGCTGTGGCAGCACTGGATCACCCAGGTCCCAGCAGACATGGCCGCCCCAAAGTCAGC
AAGCCTCCTTTGTGCTATGTGGAGCTCACAGCCTCACATGTGAACACCCGTGTCTGGGTTGCCCTGGGGTGATCCT
CCCTCCTGCGTGGTGGCTGTCTCTGGAAGCATCCCTTGCCGCTGCCATGGGCAGCCCCAGCCCCGTCCGTCCA
GGCTCACCCACAGTAGTGATGCAGACGTGACGTGGGGGAAGGGGGCTGAGCCCTGTGGCTGGGTTCTGACAACTG
TAACGGTTTTGTGAGCTTAGGCCCTTTGGAGGGAGAATCAATAAATAACAAACACCAACTAC

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FIGURE 2809A

TGAACAGGGAGAGGCCATGAAACAGTTTGACCTGAACTATGGAAGTGCCATCATTGAAAATTGCGGGTCCAGCCC
CGGGGAGGAGAGTGAGGTGGGTTCATGGTGGGCGAAGGCTTCATCGAAGTCCTGACCAAGAAGCAGCGCCGCCT
GCTGGAGGAAGAGAGAAGAAAGAGGAGCAGGCCGTGCAGGTGCCTGTCAAAGGTCGAGGCCTTTCTCCCGTAT
TCCTCCTCGATTGCAAAAAAGCAGAACAACTTATGTCTGGAGCAAGGTGACGTGACCGTGCTGGCAGCAGCCT
GGGCACTGAGATCTGGGAGAGCAGCAGCCAGGCTCTCCCTGTGCAGGCCCCAGCCAACGACTCCTGGAGGAAAGC
TGTCAGTGCCTTCAGCAGCACCAGACTGGCTCTGCGGAGCAGGGTTTTAAGAGCAGCCAGGGAGATAGTGGCGT
TGACTTGAGTGCCGAGTCTCGGGAGTCGTCTGCGACCTCCTCGCAGCGCAGCTCCCCATATGGGACTCTGAAGCC
AGAGGAGATGAGCGGGCCCGGCTGGCGGAACCCAAGGCCGACAGCCACAAGGAGCAGGCTCCAAAGCCATCTGA
GCAGAAGGATTCAGAACAAGGCTCTGGACAGAGCAAGGAGCACAGACCAGGACCCATCGGCAACGAGCGTTCTCT
GAAAAACAGAAAGGGCTCGGAGGGGGCCGAGCGGCTGCAAGGGGCTGTCTGCCGCTGTAAACGGGGTGGAGAT
TCACGTGGACTCCGTGCTGCTGTGCCACCCATTGAATTTGGAGTCAGTCCAAAAGACTCCGATTTTCAGCTTGCC
ACCTGGTTCTGCTCTGGTCTACTGGGAGTCCAGTTGTTAAACTTCAGGATGCCTTGGCCAGTAATGCAGGGTT
AACACAGAGTATCCCCATCCTGCGGCGGGACCATCACATCCAGAGGGCCATCGGTCTCTCCCCAATGTCTTCCC
CACC GCCGACCTTACTCTGAAGATGGAGTCTGCGCGCAAGGCTTGGGAAAAC TCCCCAGTTTGCCGGAGCAGAG
CTCTCCAGGCGGCGCTGGCTCAGGCATCCAGCCTCCATCCTCTGTGGGTGCCTCCAGCGGGGTCAACTACAGCTC
CTTCGGTGGAGTGTCCATGCCACCCATGCCTGTGGCCTCTGTAGCACCTTCTGCTTCTATGCCAGGCAGCCACCT
CCCCCCCCGTGTACCTGGATGGCCATGTGTTTGCAAGTCAGCCCCGGCTGGTTTCTCAAACGATACCTCAGCAGCA
GAGTTACCAACAGGCCGCCGCTGCCCAGCAGATCCCGATCTCCCTTCACACATCTCTGCAGGCACAAGCTCAGCT
TGGACTGAGGGGTGGGCTTCTGTGTCCCAGTCCCAGGAGATCTTCAGCTCCTTGCAGCCCTTCAGATCTCAGGT
GTACATGCACCCCCAGCCTGTACCCGCCAGCACCATGATCCTCTCTGGGGGCACAGCCTTGAAGCCTCCATACTC
GGCGTTTCCCAGGCATGCAGCCCTTGGAGATGGTGAAGCCGCAGTCTGGCTCACCCCTACCAGCCCATGAGCGGGAA
CCAAGCCCTGGTCTACGAGGGGCCAGCTCAGCCAGGCTGCTGGCCTGGGTGCCTCCCAGATGTTGGACTCCCAGCT
CCCACAGCTGACCATGCCACTGCCTCGGTACGGCTCCGGGCAGCAGCCACTGATCCTGCCCCAGTCTATTTCAGCT
GCCACCTGGGCAGAGCCTCTCCGTTGGGGCCCCCGAAGGATTCTCCGCCCGGGTCCCAGCCGCCAGTCTCTGAA
CACCAGCAGAGAGCCCTCTCAGATGGAGATGAAAGGCTTCCACTTTGCCGACAGTAAACAGAATGTCCCTTCAGG
AGGCCCCGTGCCATCGCCACAGACCTACAGGCCTAGCTCTGCTAGCCCCAGTGGGAAGCCCTCTGGATCAGCAGT
TAACATGGGCTCTGTGCAGGGACACTACGTGCAACAGGCAAAACAACGAGTGGATGAGAAACCCAGCCTGGGAGC
CGTGAAGCTGCAGGAGGCCCCCTCGGCTGCCTCCCAGATGAAGCGAACCGGAGCGATCAAGCCTCGGGCTGTCAA
AGTGGAGGAGAGTAAGGCCTGACAGTGCCTGGCTGCCACCTCGCCTCTCCCTACTGAGGACGGTGCCGCCATGCG
GCCTCGACACAGCCGACACTCGGGAGCCTCACCAGATCCACCGTCCAAATGCGTGGCCCAGACTGAGAGACCTCC
CTCCTCTCCACTCCCAGAAAGCTCCGTTGTCAACCAGCTTGCACCCGTGGATATATGGCATTGACCCGCTTGCTTT
GATACGAAACAAAAAGCAGACGACTCCTTCATCCCATCTGCTCCTACCGTGACTGTGGAGTGACGCCCTCCTGTG
CAGTGCAGATTTGCCCTCCCTGCCTCCTCCTGTCTGCGCGCAGCCAGGGCGCCTTCTCAGCAGTGCTTCCGG
CCCAGCCGCCCATCCCTAGGCACAGTGATTTGGCAGCAGGGTCATTTTACTTTGAGGCTTTTTGTTTTAAATGT
AGCCAAGGTTTTTACAAAGGGGAAAGGAAAAGAAAACAAAACGCAAGCTCCATGTGTATAGCTGAACTTTTATA
TGTTTTCTTGCCAGCCCCCTCCGCTCCCTTCCATCTCTAGCCTCTGTCTGTGTTAGTTTGATACGTCACTGCAGTAC
CTTAAGAGGTGACTCTTAAGAATGCATCCCTCCTGATTCTCAGCTGGTTCACCCTTGAGGTTATTGCAAAAA
GAAAAGGAGGTTCTTGAGGGCACCAGATTGCGAGCATTCTGGTGCCTGGCTCCCCGCTGGGAAGCGATGGGGTGC
TCAGAGCAGCAGGCAGGTTGGGGGAGGGGGGGGTCATAGTTGGGTTCAGCTCCTGGCTTGATGAGCCCAGGGC
GCTTACAGGCAGCCCATGAAGTTGATGACAGTTTATGATGAGAATCACACAGGGTCCCTGTCTGGGCTCCTCT
AAAGCCAGTGGATGTGCTGGGCACCAGAGACAAATCATGGAGATGGCTGTGCTGGTGGCTCCCAGGTTGGCCAGAT
GGGGTGAGCTGACATACCACAGGCCCATCCAGGCCCGTGGGCTCTGCTTCTGGGGCTCCATACCCTGCCCTGC
AGGGGTGCTGTGTTTTTTCACACATTTCTTTCCCTGAAGCCTTCTGTAACCTGTCATTTTCTTCTCTCTCTCC
GGAGCCTGCTGCTTTCTCTGGACCTGTCTCCACCTCCACACAGCTCATCGTGAACACCACCTGGTGATGGAGGG
AGTGGACCCGTGTGTGGTCCCCAAGTGAGGCCACTGGGAGTTTGCTCTTTCTCTCTCTCTCTCTCTCTCTCTCT
CAGACCCAGGTTGTGAGGACAGGAGGGCCTGAGCTAAGCAGTAGGCATCAGTCTCGTTTGTCTTCAGACGGCGGG
GGCAGGTCCAGGGTGAGGCTGGGTGGAGGGCTGACCAAGGTCCAAAGGCCCTGCGCAGCCTCCGGGAGGGCAGCT
TCTCCAGCCAGAGGCTTGTGTGAGCCATCGTGTGCTGGGCTGTGTTTTTAAGTAAGAAACAAGGAAATCACTCCAG

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FIGURE 2809B

ATTCTGTCATTCCAAGGAAAGGGAAGGGGACAGTTCAGGTTTCTCAGCTGTTCTTAGGGGTCAGTGAAGCTCTAC
CTCCTCCTCCAGAGGAGGCTGGCTCAGAACACCTAGAGGAGGGGGCCGGGGATGCACCCCCACCAGAGGCTGCC
TTCAGCGTCTCACGGGTGCAGGACAGCGCTCAGGCTTGGGCTCTAAGCTCTGTGTCTAGTGTAGAACATGGGGAA
GGAGCATCTTAGGAACTGCTGAAGTAACCTCTTACTGCTCTCACAATTCTAAGGAAGCGGGAGAACGGCCTCCTA
CCAACAGCGCCCCACCCAGAGCTGCCTGGGAAAGGGCAGTTTTACTGAAAGGTGCTTTACTGTTTACCTGCATCT
TTCAGCAGCTCCCCCTCCTGCCCTCACCTGGTCTTTTCCCTCTTTATCCCAAGCCTTTATGCTTGAGTCCCTTCCC
CAGGGGCTGCCACCCGACAGTTCAGGCATTCCCTACCTGAGCTTCTTGTCTGCTTTTCTTCTCCCACTGCAA
GCGGCTGCTTGTGGGGCTGGGATGAGCCCTCTCTGTCCCCACCGCCCTCCTTGCCAAGCCATTCTGGGTGAG
TTCAGGCCTGCGGGAGCCACACATTCACTCTCCACCTGGACACTTGAGCCGCATGGCCAGACCCCTCCACCTGAT
GCGGTGGTGCGTGTGATTTGTCAAAAGAAAGCCTTCTGGATGCTGTTAAGATGTACCCTTCAGGTGAACCTGGTA
TCAGACCCACAGTACTTGCTGTTTGAGAAAAAATAAAAAACAAAAAGGTACCTGTTCTCCAGCCCTTTTCTCTTA
CCTGGTATTTCTTCTCTTCTCTCTCCCCACCCCAAATAAAAAACAAAAACACTAGAAATTTATTTATATGTAT
TGATGTTGTAGGTCTAGGTGAAAAAAGAAAGTAAATGTTTCACTGCTCTATTTATATATAATGTCTGAATTAA
TTCTGTGCAGGAAAGGCCAGGAAATTGCATGTGAAGTTCGGTGCAGTACCACCTGTGTGTGACCTGAGCTGCAG
TCTCTTCGCTGAGATGCAGGTTTTAAATGAGACTTGGGGGGCTGAGGGCAGGCCTCAGGCCTCCAGCGCCCCAA
CCCCTCCTTGGTCTAATGAAATGCAGTTCTTAGTGACAGAGATGTTTTAAGGTGCAATATATCTCTTCTTCCCG
TGGTTTTAGAGCCAAGCTCAAGGTAGTAGGACGTAGGGTCTTATTTTGTCTTCAAACCCCATCCTCAGAGCGCA
GATACATGCAGAGGCTTCTGCCAGGATACACGGGGCCTTAGTGGGAACAGGTGGAGACCAGCACTTCCCTTTCC
TGCTGCTGAGGTAGGGATTGGGGGGTCAGAACCCACTCACTTTTGCCTGTTAAAGTTGCCCTCCTGACGCTGGCA
GCTCTGCCTTGGTCACTGGGGATGCGGCTCGTTGCTCAGCCACCAGTGGCCTTGCGGTATTGTCCACCATCCACT
AGAGTGGGATGAAGTCCAGAGTGTGGGTATACATCTCAGATGCCATCTACCCACTGGGGACTTCAATGCCAGCT
GCATTTGGTTTGGTTTTCTTAACTGTTGGCTTCTCCCCACAGCGTTTTTGTTTTTTTTTTAAACATTCAATTTGT
TTTCAAACCTTGAATTATAGACACTCTGGCTCTAGGTTCCTTAAGGGGGAAAACAAAAGATGACTTTATTTTAC
ATTCAAGAAAATCAGTTCAGTTCCAAAGCTGTGGTCTTCCAGCCACTTCTAGGGACACTGGGGAACCTTGTAA
ACGTTGACATCAGTGTCTCTCAGCCGTGCTGTACCCCTCCTATCTTCTGGATCTGCCTTCGCGATGGTCAGTGAC
AGCTTCTGGAAGCTGAGCACACACAGGTGCACAGCCATGCTGTGGTCTGGCCTGCTACGGCAGCATGGCAGCTCT
GGTGGAGCCTTCTCCCTTGCCATTTGGTTCCCTGTGCCAAGTAGCTGCAGGCTGCCCTCAAATCTTCATTTGT
CCCTTTTCACTTCTTGCAGAACAGCCTGGGTTAGAGGGTCTGCTGGAATGGCCTTTGAAGACCAAGGATACCA
GGATGTGTGCACTCTGTCTGTCTGTGATGAATGGGAAACGTAGGCTTCCAGAAAGCCAGCTCTCTTCTGAAAT
GTGACGGACCTAAGCAGGAAGTCATCCAGGACAGGAGTGGCTCAGTGTGGGGATGGACGCTGTGCCCCAGCCAT
GCTCCACAGGGCCACCAATGTGTAGTTGGCTGGTGGTCTTCGGGCATGTGAGACCTGCTCTTCACTGTTCCAC
CCCCTTGGTGGCCTCCAGGATGGTAGTGGCACCCCTCAGAGCCCATCTTCAGCATGTTCTGAAGCCTCAGAGTG
GAAATTCCTGCTAAGGCTCTGTGTGGACGCCTTTCTCCGTGATCTAAAGGGGACACTGTACTCAAGCTTTTGAC
CTCATGCCTTGTGTAGTAAAAAGGATTTGGGGTTTTGTTTGGTTCCTGAGAGGGTGTGTTTTGTTTTGTTT
CCTTTTGTATATGTTTTGGCCTTTCTCTTTTGTCTTTCCATGTAGACCAGATATTTGAAAGGGCAGACGATGGCT
AGAGGTGTAATGTGCAGCTTGTATACGGTATTTTGGGAACTTACCTTGGATGGGAAATCGAATCGTGGAATC
ACCAGGCCGGTGTGGCACACTCACCTCGCCCTTTCCCTCCGGTTCAGTACCTATTGTTTCTCCTTTCAAATAT
GTGATTGTACTAGCTCTTCCATATGAAAGAATTCTCCTTATTTAAATAAAAAAGTTTAAAAAGAT

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FIGURE 2810

MKQFDLNYGSIIENCGSSPGEESEVGSVMGEGFIEVLTKKQRRLLLEEERRKKEQAVQVPVKGRGLSSRIIPRFA
KKQNNLCLEQGDVTVPGSSLGTEIWESSSQALPVQAPANDSWRKAVTAFSSSTETGSAEQGFKSSQGD SGVDLSAE
SRESSATSSQRSSPYGTLKPEEMSGPGLAEPKADSHKEQAPKPSEQKDSEQSGQSKEHRPGPIGNERSLKNRKG
SEGAERLQGAVVPPVNGVEIHVDSVLPVPPIEFGVSPKDSDFSLPPGSASGPTGSPVVKLQDALASNAGLTQSIP
ILRRDHHIQRAIGLSPMSFPTADLTLMESARKAWENSPSLPEQSSPGGAGSGIQPPSSVGASSGVNYSSFGGVS
MPPMPVASVAP SASMPGSHLPPLYLDGHVFASQPRLPQTIPQQQSYQAAAAQQIPISLHTSLQAQAQLGLRGG
LPVSQSQEIFSSLPFRSQVYMHPSLSPSTMILSGGTALKPPYSAFPGMQPLEMVKPQSGSPYQPMMSGNQAALVY
EGQLSQAAGLGASQMLDSQLPQLTMPLPRYGSQQFLILPQSIQLPPQSLSVGAPRRIPPPGSQPPVLNTSREP
SQMEMKGFHFADSKQNVPSGGPVPSPQTYRPSASPSGKPSGSAVNMGSVQGHYVQQAQQRVDEKPSLGAVKLQE
APSAASQMKRTGAIKPRAVKVEESKA

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FIGURE 2811

CTCACCTCCCGGAGGCTCTGCTGGTGCAGGCCCGCATTGGAGGGCTCGATTGGCTGCCCGGCTGGCACTGACGT
CCCCTTGGAGCTGGGTGGCAGAGGAGATAAACAGCCATGTGCAACTCTCCACACTATATTTAACAGCTGCGGCGG
AGAAGGCAGGGAGGCAGCCACGGTGGCGGCTCTGGGGGCAGCTCTTGTCTTCGGGGAGAAGGCCCTTGGAGCCGG
GCTGGCATCGGCCCTTCTCGGGGTGAGCGAGGTCAACATGCCAGCTTCCCAGAGCCGGGCGCGTGCCGGGACCGC
AACAACTCCTCAACCGGGCTGAGTTCCTGTCCCTGAACCAGCCCCCAAGGGGGGCCCGGAGCCCCGCAGCTCG
GGCAGAAAGGCCCTCGGGCCCATCAGCACAGCCCCACCTGCTGGTGACGGGGCCAGAGAGCGACGCCAGTCACAG
CAGCTGCCAGAGGAGGACTGCATGCAGCTGAACCCCTCCTTCAAGGGCATCGCCTTCAACTCCCTGCTGGCCATC
GATATCTGTATGTCCAAGCGGCTGGGGGTGTGCGCTGGCCGGGCGGCGTCTGGGCCAGTGCCCGCTCCATGGTC
AAGCTCATCGGCATCACGGGCCACGGCATCCCCGGATCGGAGGCACCATCCTCTGCCTGGTGAAGAGCAGCACA
CTGGCCGGCCAGGAGGTGCTCATGAATCTGCTCCTGGCCCTGCTCCTGGACATCATGACGGTGGCCGGCGTGCAG
AAGCTCATCAAGCGGCGCGGCCCGTACGAGACGAGCCCCAGCCTCCTGGACTACCTCACCATGGACATCTACGCC
TTCCCGGCCGGGCACGCCAGCCGCGCGCCCATGGTGTCCAAGTTCTTCTCAGCCACCTGGTGTGGCGGTGCC
CTGCGTGTGCTGCTGGTGTCTGGGCCCTCTGCGTGGGCCCTGTCCCGCGTGATGATCGGCCGCCACCACGTCACG
GACGTCTCTCCGGCTTTGTATCGGCTACCTCCAGTTCCGTCTGGTGGAGCTGGTCTGGATGCCCTCCAGCACC
TGCCAGATGCTCATCTCTGCCTGGTGAAGCGCCCCGCCGCCACACAAGCCTCTGGGGGCAGGGCTGGCCCTAGA
GAAGGGGCAGGGGTGGCGAGGTGGCGGGCGTGGGTGGAACAGAGCGGCCAGGAGTCAGAGCGGCCACCCCCACC
TCATCTTCCCCTCCTGGCTGGAGGCTGGCGAAGCCAGGCCACCCCTCCCGGAGACAAGCGTGTTTGGCAGTGCCA
GGCCTCTTGCCCCCTTTGCTTGGACTCCAAGTCTCCTCTCTAGGCAGCCAGGACCCACCCATGGGGACAGCCCTAT
TTAGCTTCTGCTCTGGGAACAGCAAAAATCAGGATGGTGGGAGGGGCCGAGTCTTGTCTTGTCTTTTCATCATCA
TGACTGTTGAGTTCTTGGCTGTGCCCATCACGCCACAGCACGACGCTGCCAAAATGCCCCCAACCTACTGCCTG
ATGCAGGTGCCATTGCCATTAGCGGTCTACGACAGCTTAGGGCAGCACTTTCCAACGGGTGCCCATGGGACACCA
GCCTGCGAGATGCTTTTGGGGGAAAGGGTTTTGTGGTTCAATAACTTTCGGAAGTGCTGCACACTCTGTCCCCA
AGTTGGACATTCACAAAGGCCGTTATTGCCGTAAAGGCTCTGACAAGCCCTATAGAAAAGCTTCTTGCTAAACCT
TCTTTAAGCCATGTTTTCTAACTTATTTGACCACAGAACCCCTTTTCTTGGGGAACAGCTATTAACCCCCAAGGA
ATTATTGGTTCCTCAAGTGCGTTTTTGGGAGCTGTGCCAGAGAGCTAAAGGGCCTGGGGTGTGAGCTGACTCTCC
TCTGGGGAGGCCGGGTGCACACGCCACAGCCCAGGAAAGTGCTGGCCACCGCCCCGTGGGCATCGATGAGGCTTT
GGCCCCAGGGGCCGGACTCCGTGTGACCTAATAGGTCGTTTCCAAGTCACCCGTTTTTGGATGTGCATTTTCATGT
GACAATACAGATGACATGCAAATGG

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FIGURE 2812

MQLNPSFKGIAFNSELLAIDICMSKRLGVCAGRAASWASARSMVKLIGITGHGIPWIGGTILCLVKSSTLAGQEV
MNLALLLLDIMTVAGVQKLIKRRGPYETSPSLDYLTDIYAFFAGHASRAAMVSKFFLSHLVLAVPLRVLLVL
WALCVGLSRVMIGRHHVTDVLSGFVIGYLQFRLVELVWMPSSCQMLISAW

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FIGURE 2813

GGCCAAGGGATTGCTGCAGCCCTCATCCACCTTCCAAGCACTGGAAACAAACATTGGAGACCAAGGTCTCCAGAA
GCTTCCACTGACTGCTGTTGGCTGCACCAGGCAACAGGGTCTGGCTCTGTACCCAGGCTGGAGTGCAATGGTAT
GATCTCGGCTCACTGCAACCTCTGCCTCCCAGGTTCAAGCGATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGAT
TACAGGTCCAGCTGGGAGCTCCCCGACCTCCAGGAGGGCAAGATCCAAGCCATCAGCGACTCGGATGGGGTGAAC
TACCCCTGGTACGGCAACACCACAGAGACCTGCACCATCGTGGGCCCCACCAAGAGGGACTCCAAGTTCATCATC
AGCATGAATGACAACTTTTACCCCAGCGTCACATGGGCGGTGCGCGTCAGCGAGAGCAACGTGGCCAAGCTCACC
AATATCTACCGGGACCAGAGCTTCACCACCTGGCTGGTGGCCACCAACACCTCCACCAACGACATGATCATCCTG
CAGACGCTGCACTGGCGCATGCAGCTCAGCATCGAGGTGAACCCCAACCGGCCCCCTGGGCCAGCGCGCCCGGCTG
CGGGAGCCCATCGCCCAGGACCAGCCCAAAATCCTGAGCAAGAATGAGCCCATCCCGCCAGCGCCCTGGTCAAG
CCCAATGCCAACGATGCCAGGTCTCATGTGGCGGCCCAAGTACGGGCAGCCGCTGGTGGTGATCCCGCCCAAG
CACCGGTGACAGCCAGGACCACCCGCTAGGTTAGACTCACAATAATA

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FIGURE 2814

MNDNFYPSVTWAVPVSESNVAKLTNIYRDQSFTTWLVATNTSTNDMIILQTLHWRMQLSIEVNPNRPLGQRARLR
EPIAQDQPKILSKNEPIPPSALVKPNANDAQVLMWRPKYGQPLVVIPPKHR

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FIGURE 2815A

GCTTCAGGTCAAATTAGGGCTTTGGGTCAAATCAGGGCTACCTGGTCTGGGAGAGGCACACTTCTAACTGCTGAT
GCCACCCTCAAAGGGTCTCCAGAAGCTTCCACTGACTGCTGTTGGCTGCACCAGGCAGTGAGTATCAGTACATTT
AATCATCACAAAAACCGGGCAGGCAGATGTTGGCGGATTGCTGTGGGCTGCTGAAGAGCTGGTAGAGCTCAGCG
CGTCTGTGACTGGACCACAGTGCAGTAGCTGGGGCTGACAGTGGACCCTGGGCTGCTGCACCCGCTGCAACCCC
CAGGTGGAGGGATCCACGCAGCCTGGTGACGATTTGGCCCTGGCCCTGAGCCATGCCCCGCTGACGCAGTGCTG
TCTGCCAGCCTGGGAGGCTCCTCACCTGTCTTTGCCTGAGCCAGGGCCTGGGAGTTTCAGGACTGGGAAAGGAAA
GAAAACCCCAAGGCTGGGGTCAGGAAGAGGAGGGCTATTTTGCTGCTCAGTCTGCTCCCCCAAACCAGACCTTC
AGCTCTTTGCAAACGAAAGAGGGGGCAAGGCCAAAGCGGGGTTCCTATGCAAGTTTGCTTCTGCCCAGAAAA
CCAAAAAACGGAAACTTTTCCAAGCAAGTGAAGCACTGTGTGAGGACAGAGTGGGCGTTTCTTCTGAAATA
GGAGACTAGGCCCCAGTGGGCAAAGAGACCCTGACCCGCTTCTCCATCTGTGCGGGGAATGAATGAGCAGGCT
CACCCTGTTGTATCCTGCTGCTGTGGGGCCCCCTAGATCTTAGGAATTGCTGGGTACTTCCGGACAGTG
AGGTTGTCTGAGCTGCCTGCAGGTTCCCTGAGTCTGGGTACTCAGGGGCTGGGCAGGAGATGCCATTAAAGCAGG
TGTTACTCTAATGAGTGAGCTTTTCAATGAGATGAACAGGAAAAATTAGCAAAATCATGTTCTTAATCATTCTCC
TGCGGCGGGCCCCAATTTTGCTAACTGTTAACATTATATGATGCATAAGTAGGGGAATGCATTTTTAAATTTATGG
TAAAGCCTATGTAACATTTTATAAAATTGACCATTTTATTTATTATTAATTTTTTTTTTTTAAAGACAGGGTCT
GGCTCTGTCAACCAGGCTGGAGTGCAATGGTATGATCTCGGCTCACTGCAACCTCTGCCTCCCAGGTTCAAGCGA
TTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGATTACAGCCTGTGTTGGAACATCCTTCTTCTTAAGGCTGAAGA
ACATTCCATTGTCCAGCTGGGAGCTCCCCGACCTCCAGGAGGGCAAGATCCAAGCCATCAGCGACTCGGATGGGG
TGAATAACCCCTGGTACGGCAACACCACAGAGACCTGCACCATCGTGGGCCCCACCAAGAGGGACTCCAAGTTCA
TCATCAGCATGAATGACAACTTTTACCCAGCGTCACATGGGCCGTGCCCGTCAGCGAGAGCAACGTGGCCAAGC
TCACCAATATCTACCGGGACCAGAGCTTCACCACCTGGCTGGTGGCCACCAACACCTCCACCAACGACATGATCA
TCCTGCAGACGCTGCACTGGCGCATGCAGCTCAGCATCAGGTTGAACCCCAACCGGCCCTGGGCCAGCGCGCCC
GGCTGCGGGAGCCCATCGCCAGGACCAGCCCAAAATCCTGAGCAAGAATGAGCCCATCCCGCCAGCGCCCTGG
TCAAGCCCAATGCCAACGATGCCCAGGTCTCATGTGGCGGCCCAAGTACGGGCAGCCGCTGGTGGTGATCCCGC
CCAAGCACCGGTGACAGCCAGGACCACCCGCTAGGTTAGACTCACAAATAATAATACCGCTGAAAAACAAACTCA
GACTCACTCTTCAGTCATTACAGCAAGATACAACCATTTCTACCCCTCTCCAGCGGGCGGATCTCACTGTGCTGATGC
CCCCGGGAAGGCCTCCCCGGCTCTCGGCACCTGCTTCCTTTTCAAGGAGAGGGGAGATCTAAGCAGGACAGACAGA
CCCCACGTGCGCCCTCAGGGTGACCTCTGGTCTCCTTGCCCTCTCCTTTTTCTCAGTTTCAGTCGCTCACTTGTA
CAGATTCCCTGAAACACTGCTTTTTCCGTTTTTAAAAAACTCCTCTTTTGGGGGCTCAGGGGCAGGAGGAGG
GGAGCTGATTAGGAGGGAAGCTCCAGCCCCGATCAAAGAGACAGATCCACACTGCTGCCGATTTGTGGCGCTGG
CCGGCCTTCCCCCAGGTCCCTCCGCCCTCTGTCTATGCGGCCTTATGTAGACTTGCTTTGCCAACTTTTGCTT
AAGCTGAATTGAAAGGAAGAAAACCAATCGGAGAAAGAAAGCAGGATCTCTTTTCTACCGGACTTTTCTCTTCT
GCCAGAGGTGGAGGGAGGGTTGGGGTCGCCCGCAGAGTCTCTTGAGCCCTTCTTCCCGGTTGTCTTGGGAGAAG
GGTGAGGATGGGCATTTAGACCCGAAACCAGCTGCTCACTCTTTCTTTTGGCAGAAATAAAACCACAGGTAGAT
TCTGCCTGAACAGCCCCTTCTCTCCCTCCACCCCAAGGTCGTATCCCTGCACCTGCGGAGAGGGGCTGTGAGCTC
TGGCGGGGGGTGGCTCCACAGTCCGCTGGCCTCTTCTCCCTCTCTTCCAGCAGCCTTAACCTCCCTTGGGCG
GCTCTAGGAGGAGAGAGGCAGGCTCCTGTGAGCCCAGGGAATTTTACCCCTCTCAGTCTCAGGACCCACCCCA
GTTGAGTCCCTGGCCCTTCTTCCAGGTGTGTGGCTTTTTCTTCTCCATCCACACTGGTCCCAATGCCTGGGG
CCGGCCACCTGGACCGCCGACACACAGCCTCAATGTTAGTCTCAAAGGTAAGGAAGGCATTACGTCCCTTCTTG
CAGGGCATTTTAAGACTTGAATCGGGTGGGCCCCGGCCCCCTGTGGCTGGCTGGCCCCCTGGTGTACTGTAAAAGG
CCAAGACAGGGCTCGTTCTCAGGGGCGCCCCCTCCAGGCCCTCAGGCGAGCGGGACGGTGCAGTCAGGCTCTGGG
TGCCACAGTGATGGAGGTGGAAGGCACCAAGCTCTAGGGAAGTCTTGGGAGGCAGTCGGCCGAGCCCCCTGCTTC
CTGTCTCTCAAATAAGTGAATCCAGGCCAAGGGCTGGGAGGGCTGGGTGGGCTTATCGTCGAGAGGGTTGAGAGCC
ACTCTGGAGGCTGGGCTGGCACAGTGGAGAGCAACAGGTGAGGACAGACGTCTGGAAGCCCCATCCCTGGGACCTG
CCCTCCCTCGGTCCAGGTCACTGGAGCTCCAGGGCTTACTAGTCTGACCCATTGTGCCCCAGGGTTCTGAGCAG
TGTGGCCCTTGTGGCCACTTGCAGGGGCTATTAGGGGACATCCCGCTGAAGCCACGCTCCTTCCAGCTTGCCAAA
CCCACAGCTACCCGCCCGGGACCCACACTCAGCCTAATAATTATCAAGCACAGAAAACCGTCCATTTAGAAAAAT
AATCCATTTCTGCTGCAGATGAGCCACTTGTAAAGAGTCTCCGTGACAGCGTGGGACGGTGTGGGAACCAAGTCC

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FIGURE 2815B

CTGCCCTGCTCCTTTGTCCACGGGCTATTGCGTTTATTCAAGGGGTGCTTAATGACCGTTTAGCCACTGCCGTCG
GTCTCCGGGGCCAGCTCGTGCCAGGAGGCTGTCTGGGACACACTGGGCTGGAGCTGCCGGCTGGCACGGTGCTC
AGGGGGCCCCGTGATGGGGGCCAGGACCTCCCCGCAGAACTGCAGGTTCTCTTGAGGATGGAGGCCGTGCCAC
CCCGAAAGGCAGTAGCCTTAGGGGAACAGTGGGTCCCAGCTGCATGTCTGAGGATGGGTGGGGACAGGGCTGGGA
CTCAGCTTTTATTCACTGGAGACTTCTCCACTCAGGTCCTTGTGCACTAAAGCAGGGACAGGACCCTGGGGGTT
CAGGAAGCGGGTCTCAGGCCGCTGGTTTATTCCTGGAGGTGGGGCTGGAGACCAGAATGGAAAGGGGCTTCCTGA
GCTGCTAGGGGGTGAAGGACCCCCGAACCCGCATTTCTTGAGTGAGAGCAAACACTCGAGGCAGGAGCCAGCACC
CCTCCCCTGTCATGCCCGGCCCCAGCCACCTTGCCCCCTGACCCACCTTCACCCGTGCCCTTCTTTCTGCCC
TTCCTCACCGAAGAAGGGCTAGGAACACCTTGAGAGGCTGCAGGTCCGGCCACGGACGCTCAGCTGAGCCCCGG
TCTGCTCCTTCAGCCTCCTTGCTCATGTTGGAGCACAGGCCCCAGGCTTCCTGCCAGGGCCCCGATTCTTCTTAT
GTCCTCCAGCCCCGCCCTGGCGTGGACATCCACTCACTCCTTCCAGCAATAAGAACCGTCCTTGGTCGTGGAGAG
TACTGTGAAACAAACCAATGCACTTACCAGGAGGCACAAGACTCTTGAAGAAGATGTACAATGAACCTTTTTTTT
TTTACAAAAAACAAAAAGCAAATATTCATAAAGAGAAATAAAATGTAATTTTAAAGT

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FIGURE 2816

MNDNFYPSVTWAVPVSESNVAKLTNIYRDQSFTTWLVATNTSTNDMIILQTLHWRMQLSIEVNPNRPLGQRARLR
EPIAQDQPKILSKNEPIPPSALVKPNANDAQVLMWRPKYGQPLVVIPPKHR

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FIGURE 2817A

AGGGGAGGAAGTTTGTCTGTCGAGCGGCCTGGGTTCCTGTTGGGCAAGGCCGTGGGAGGCAGCGTTGGCTGCTTCGAC
ACACTGAGGGCGGCGCGATGGGAGACGAGATGGATGCCATGATTCCCAGCGGGAGATGAAGGATTTTCAGTTTA
GAGCGCTAAAGAAGGTGAGAATCTTTGACTCCCCTGAGGAATTGCCCAAGGAACGCTCGAGTCTGCTTGCTGTGT
CCAACAAATATGGTCTGGTCTTCGCTGGTGGAGCCAGTGGCTTGCAGATTTTCTCTACTAAAAATCTTCTTATTC
AAAATAAACCCGGAGATGATCCCAACAAAATAGTTGATAAAGTCCAAGGCTTGCTAGTTCCCTATGAAATTCCCAA
TCCATCACCTGGCCTTGAGCTGTGATAACCTCACACTCTCTGCGTGCATGATGTCCAGTGAATATGGTTCCATTA
TTGCTTTTTTTTGATGTTTCGCACATTCTCAAAATGAGGCTAAACAGCAAAAACGCCCATTTGCCTATCATAAGCTTT
TGAAAGATGCAGGAGGCATGGTGATTGATATGAAGTGAACCCCACTGTCCCCTCCATGGTGGCAGTTTGTCTGG
CTGATGGTAGTATTGCTGTCTCTGCAAGTCACGGAACAGTGAAAGTATGTGCAACTCTTCTCTCCACGGTAGCAG
TAACCTCTGTGTGCTGGAGCCCCAAAGGAAAGCAGCTGGCAGTGGGAAAACAGAATGGAAGTGTGGTCCAGTATC
TTCCTACTTTGCAGGAAAAAAGTCATTCTTGTCTCCGTTTTATGAGTCAGATCATCTGTGAGAGTTCTGG
ATGTGCTGTGGATTGGTACCTACGTCTTCGCCATAGTGATGTCTGCTGCAGATGGGACCCCTGGAACGTCTCCAG
ATGTGGTGATGGCTCTACTACCGAAAAAAGAAGAAAAGCACCCAGAGATATTTGTGAACTTTATGGAGCCCTGTT
ATGGCAGCTGCACGGAGAGACAGCATCATTACTACCTCAGTTACATTGAGGAATGGGATTTAGTGCTGGCAGCAT
CTGCGGCTTCAACAGAAGTTAGTATCCTTGCTCGACAAAGTGATCAGATTAATTGGGAATCTTGGCTACTGGAGG
ATTCTAGTCGAGCTGAATTGCCTGTGACAGACAAGAGTGATGACTCCTTGCCCATGGGAGTTGTCTGAGACTATA
CAAACCAAGTGAAATCACCATCAGTGATGAAAAGACTCTTCTCTGCTCCAGTTCTCATGTTACTTTCAACAG
ATGGTGTGCTTTGTCCATTTTATATGATTAATCAAAATCCTGGGGTTAAGTCTCTCATCAAAACACCAGAGCGAC
TTTCATTAGAAGGAGAGCGACAGCCCAAGTCACCAGGAAGTACTCCCACTACCCCAACCTCCTCTCAAGCCCCAC
AGAAACTGGATGCTTCTGCAGCTGCAGCCCCCTGCCTCTCTGCCACCTTCATCACCTGCTGCTCCCATTGCCACTT
TTCTTTTGCTTCTCTGCTGGTGGAGCCCCCACTGTGTTCTCTTTGGTTCTTCTCATCTTTGAAGTCATCTGCTACGG
TCACTGGGGAGCCCCCTTCATATTCCAGTGGCTCCGACAGCTCCAAAGCAGCCCCAGGCCCTGGCCCCATCAACCT
TCTCTTTTGTTCCTTCTTAAAGCCTCCCTAGCCCCCACCCCTGCAGCGTCTCCTGTGGCTCCATCAGCTGCTT
CATTCTCCTTTGGATCATCTGGTTTTAAGCCTACCCTGGAAAGCACACCAGTGCCAAGTGTGTCTGCTCCAAATA
TAGCAATGAAGCCCTCCTTCCACCCCTCAACCTCTGCTGTCAAAGTCAACCTTAGTGAAAAGTTTACTGCTGCAG
CTACCTCTACTCCTGTTAGTAGCTCCCAGAGCGCACCCCCGATGTGCCATTCTCTTCTGCCTCCAAGCCAGCTG
CTTCTGGACCACTCAGCCACCCACACCTCTCTCAGCACCACTAGTTCCGTGCCATTGAAGTCCTCAGTCTTGC
CCTCACCATCAGGACGATCTGCTCAGGGCAGTTCAAGCCAGTGCCCTCAATGGTACAGAAATCACCAGGATAA
CCCCTCCAGCGGCAAAGCCAGGCTCTCCCCAGGCAAAGTCACTTCAGCCTGCTGTTGCAGAAAAGCAGGGACATC
AGTGGAAGATTAGATCCTGTAATGGCTGGAATTGGGGAGGAGATTGCACACTTTCAGAAGGAGTTGGAAGAGT
TAAAGCCCCGAACCTTCCAAAGCCTGTTTCCAAGTGGGCACCTCTGAGGAGATGAAGATGCTGCGAACAGAATCAG
ATGACTTGCATACCTTTCTTTTGGAGATTAAAGAGACCACAGAGTCGCTTCATGGAGATATAAGTAGCCTGAAAA
CAACTTTACTTGAGGGCTTTGCTGGTGTGAGGAAGCCAGAGAACAAAATGAAAGAAATCGTGACTCTGGTTATC
TGCATTTGCTTTATAAAAGACCACTGGATCCCAAGAGTGAAGCTCAGCTTCAGGAAATTCGGCGCCTTCATCAGT
ATGTGAAATTTGCTGTCCAAGATGTGAATGATGTTCTAGACTTGGAGTGGGATCAGCATCTGGAACAAAAGAAAA
AACAAAGGCACCTGCTTGTGCCAGAGCGAGAGACACTGTTTAAACCCCTAGCCAACAATCGGGAATCATCAACC
AACAGAGGAAGAGGCTGAATCACCTGGTGGATAGTCTTCAGCAGCTCCGCCTTTACAAACAGACTTCCCTGTGGA
GCCTGTCTCCTCGGCTGTTCTTCCAGAGCAGCATTACAGTTTTGACAGTGACCTGGAAAGCCTGTGCAATGCTT
TGTTGAAAACCAACCATAGAATCTCACACCAAATCCTTGCCCAAAGTACCAGCCAACTGTCCCCATGAAACAGG
CACAACCTGAGAAACTTCTTGGCCAAGAGGAAGACCCACCAAGTGAATCCACTGCTCCAGCCAGCCTGTCTCGAT
CAGCCTTTCTGTCTCAGAGATATTATGAAGATTTGGATGAAGTCAGCTCAACGTCTCTCTCCAGTCTCTGG
AGAGTGAAGATGCACGGACGTCTGTAAAGATGACGAGGAGTGTTTCAGGCCCTCGGCACGCCCCCGTGGTTC
GCACTCCTTCCATCCAGCCAGTCTCTTGCCCCATGCAGCACCTTTTGCTAAATCTCACCTGGTTTCATGGTTCTT
CACCTGGTGTGATGGGAACCTTCAGTGGCTACATCTGCTAGCAAAATTATCTCAAGGGGGCCGATAGCACAAATGC
TTGCCACGAAAACCGTGAAACATGGTGCACCTAGTCTTCCACCCCTCTCAGCCCCGAGGCAGCTGCCGACG
CAGCACTCAGGCGGCAGATGGCCAGTCAGGCACCAGCTGTAAACACTTTGACTGAATCAACGTTGAAGAATGTCC
CTCAAGTGGTAAATGTGCAGGAATTGAAGAATAACCCCTGCAACCCCTTCTACAGCCATGGGTTCTTCAGTGCCCT
ACTCCACAGCCAAAACACCTCACCCAGTGTGACCCAGTGGCTGCTAACCAAGCCAAGCAGGGGTCTCTAATAA

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FIGURE 2817B

ATTCCCTTAAGCCATCTGGGCCTACACCAGCATCCGGTCAGTTATCATCTGGTGACAAAGCTTCAGGGACAGCCA
AGATAGAAACAGCTGTGACTTCAACCCCATCTGCTTCTGGGCAGTTCAGCAAGCCTTTCTCATTTTCTCCATCAG
GGACTGGCTTTAATTTTGGGATAATCACACCAACACCGTCTTCTAATTTCACTGCTGCACAAGGGGCAACACCCT
CCACTAAAGAGTCAAGCCAGCCGGACGCATTCTCATCTGGTGGGGGAAGCAAACCTTCTTATGAGGCCATTCTCTG
AAAGCTCACCTCCCTCAGGAATCACATCCGCATCAAACACCACCCAGGAGAACCTGCCGCATCTAGCAGCAGAC
CTGTGGCACCTTCTGGAACGTCTCTTTCCACCACCTCTAGTAAGCTGGAAACCCACCGTCCAAGCTGGGAGAGC
TTCTGTTTCCAAGTTCTTTGGCTGGAGAGACTCTGGGAAGTTTTTCAGGACTGCGGGTTGGCCAAGCAGATGATT
CTACAAAACCAACCAATAAGGCTTCATCCACAAGCCTAACTAGTACCCAGCCAACCAAGACGTGAGGCGTGCCCT
CAGGGTTTAATTTTACTGCCCCCGGTGTTAGGGAAGCACACGGAGCCCCCTGTGACATCCTCTGCAACCACCA
CCTCAGTAGCACCACCAGCAGCCACCAGCACTTCCCTCAACTGCCGTTTTTGGCAGTCTGCCAGTCACCAGTGCAG
GATCCTCTGGGGTCATCAGTTTTGGTGGGACATCTCTAAGTGCTGGCAAGACTAGTTTTTCATTTGGAAGCCAAC
AGACCAATAGCACAGTGCCCCCATCTGCCCCACCACCAACTACAGCTGCCACTCCCCTTCCAACATCATTCCCCA
CATTGTCTATTGGTAGCCTCCTGAGTTCAGCAACTACCCCTCCCTGCCTATGTCCGCTGGCAGAAGCACAGAAG
AGGCCACTTCATCAGCTTTGCCTGAGAAGCCAGGTGACAGTGAGGTCTCAGCATCAGCAGCCTCACTTCTAGAGG
AGCAACAGTCAGCCAGCTTCCCCAGGCTCCTCCGCAAACCTTCTGACTCTGTTAAAAAAGAACCTGTTCTTGCCC
AGCCTGCAGTCAGCAACTCTGGCACTGCAGCATCTAGTACTAGTCTTGTAGCACTTCTGCAGAGGCTACCCAG
CCACCACGGGGTCCCTGATGCCAGGACGGAGGCAGTACCACCTGCTTCCTCCTTTTCTGTGCCTGGGCAGACTG
CTGTACAGCAGCTGCTATCTCAAGTGCAGGCCCTGTGGCCGTCGAAACATCAAGTACCCCCATAGCCTCCAGCA
CCACGTCCATTGTTGCTCCCGGCCATCTGCAGAGGCAGCAGCAATTTGGTACCGTCACCTTCTGGCTCATCCGTCT
TTGCTCAGCCTCCTGCTGCCAGTTCTAGCTCAGCTTTCAACCAGCTCACCAACAACACAGCCACTGCCCCCTCTG
CCACGCCCGTGTGTTGGGCAAGTGGCAGCCAGCACCGCACCAAGTCTGTTTGGGCAGCAGACTGGTAGCACAGCCA
GCACAGCAGCTGCCACACCACAGGTACAGCAGCTCAGGGTTTAGCAGCCCAGCTTTTGGTACCACAGCCCCAGGGG
TCTTTGGACAGACAACCTTCGGGCAGGCCTCAGTCTTTGGGCAGTCGGCGAGCAGTGCTGCAAGTGTCTTTTCTCT
TCAGTCAGCCTGGGTTTCAAGTACCAGTAGCTCCAGTTCTTCTCATTTGGACAGTCTTCTCCCAACACAGGAG
GGGGGCTGTTTGGCCAAAGCAACGCTCCTGCTTTTGGGCAGAGTCTGGCTTTGGACAGGGAGGCTCTGTCTTTG
GTGGTACCTCAGCTGCCACCACAACAGCAGCAACCTCTGGGTTTCAAGCTTTTGCCAAGCTTCAAGTTTTGGGTCTA
GTAATACTGGTCTGTGTTTGGTCAAGCAGCCAGTACTGGTGGAAATAGTCTTTGGCCAGCAATCATCCTCTTCCA
GTGGTAGCGTGTGTTGGGTCTGGAAACACTGGAAGAGGGGGAGGTTTTCTTCAAGTGGCCTTGGAGGAAAACCCAGTC
AGGATGCAGCCAACAAAACCCATTCAAGCTCGGCCAGTGGGGGCTTTGGATCCACAGCTACCTCAAATACCTCTA
ACCTATTTGGAACAGTGGGGCCAAGACATTTGGTGGATTTGCCAGCTCGTCGTTTGGAGAGCAGAAACCCACTG
GCACTTTCAGCTCTGGAGGAGGAAGTGTGGCATCCCAAGGCTTTGGGTTTTCTCTCCAAACAAAACAGGTGGCT
TCGGTGTGCTCCAGTGTGTTGGCAGCCCTCTACTTTTGGGGGATCCCCTGGGTTTGGAGGGGTGCCAGCATTCTG
GTTACAGCCCCAGCCTTTACAAGCCCTCTGGGCTCGACGGGAGGCAAGTGTTCGGAGAGGGCACTGCAGCTGCCA
GCGCAGGAGGATTTCGGGTTTGGGAGCAGCAGCAACACCACATCCTTCGGCACGCTCGCGAGTCAGAATGCCCCCA
CTTTCGGATCACTGTCCCAACAGACTTCTGGTTTTTGGGACCCAGAGTAGCGGATTCTCTGGTTTTTGGATCAGGCA
CAGGAGGTCTGTCCAGGGTTTTGGTGGCTGGCGAAGCTGAGGGCGTGTACAGAGGCCTTTTCGATCCCTGGGACCA
ACCGCATCCTCAGCTTCTTCCCCGAGAAATGCTGGAGCAGGCTGTTTACAGCCGACGTTGCCATCAAAACACATAC
ACCCAGAAAGAAACAACAGAAACCAAACTCACAAGGCGCATGATTACTTGTGTTTATATTTTATGTTGGGTTTTT
CCTCCCACTATTAAACAGTCTGTTTCCGTAC

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FIGURE 2818

GCCGGAGCCCGGACCAGGCGCCTGTGCCTCCTCCTCGTCCCTCGCCGCGTCCGCGAAGCCTGGAGCCGGCGGGAG
CCCCGCGCTCGCCATGTGCGGGCGAGCTCAGCAACAGGTTCCAAGGAGGGAAGGCGTTGCGCTTGCTCAAAGCCCG
GCAGGAGAGGAGGCTGGCCGAGATCAACCGGGAGTTTCTGTGTGACCAGAAGTACAGTGATGAAGAGAACCTTCC
AGAAAAGCTCAGACGCTTCAAAGAGAAGTACATGGAGTTTGACCTGAACAATGAAGGCGAGATTGACCTGATGTC
TTTAAAGAGGATGATGGAGAAGCTTGGTGTCCCCAAGACCCACCTGGAGATGAAGAAGATGATCTCAGAGGTGAC
AGGAGGGGTCAGTGACACTATATCCTACCGAGACTTTGTGAACATGATGCTGGGGAAACGGTCGGCTGTCTCAA
GTTAGTCATGATGTTTGAAGGAAAAAGCCAACGAGAGCAGCCCCAAGCCAGTTGGCCCCCCTCCAGAGAGAGACAT
TGCTAGCCTGCCCCGAGGACCCCGCTGGACTCCCCAGCCTTCCCACCCATACCTCCCTCCCGATCTTGCTGCC
CTTCTTGACACACTGTGATCTCTCTCTCTCATTTGTTTGGTCATTGAGGGTTTGTGTTGTTTTTCATCAATGT
CTTTGTAAAGCACAAATTATCTGCCTTAAAGGGGCTCTGGGTGCGGGAATCCTGAGCCTTGGGTCCCCCTCCCTCT
CTTCTTCCCTCCTTCCCCGCTCCCTGTGCAGAAGGGCTGACATCAAACCAAAAAGTAGAGGGGGCAGGGCCAGGG
CAGGGAGGCTTCCAGCCTGTGTTCCCCCTCACTTGGAGGAACAGCACTCTCCATCCTTTAGAAAGTCTCCAAGC
CAAGTTCAGGCTCACTGACCTGGCTCTGACGAGGACCCAGGCCACTCTGAGAAGACCTTGGAGTAGGGACAAGG
CTGCAGGGCCTCTTTCGGGTTTCCCTTGGACAGTGCCATGGCTCCAGTGCTCTGGTGTACCCAGGACACAGCCAC
TCGGGGCCCCGCTGCCCCAGCTGATCCCCACTCATTCCACACCTCTTCTCATCCTCAGTGATGTGAAGGTGGGAA
GGAAAGGAGCTTGGCATTTGGGAGCCCTTCAAGAAGGTACCAGAAGGAACCTCCAGTCTGCTCTCTGCGCCACAC
CTGTGCAGGCAGCTGAGAGGCAGCGTGCAGCCCTACTGTCCCTTACTGGGGCAGCAGAGGGCTTCCGAGGCAGAA
GTGAGGCCTGGGGTTTTGGGGGAAAGGTCAGCTCAGTGCTGTTCACCTTTTAGGGAGGTTACTGAGGGGACCAG
GATGGGAGAATGAGGAGTAAATGCTCACGGCAAAGTCAGCAGCACTGGTAAGCCAAGACTGAGAAATACAAGGT
TGCTTGCTGACCCCAATCTGCTTGAACCTGACTCTGCTTCTCTCATTTGTCTTCTACCTACTCACATAATT
CACTCATTGACTCACTCATTACCAGATATTTATTGACCTGCTATTATAAGCTTTACATCCTCCCATGTTGTCT
GGCATGTGCAGTATACACGGTCTAACTCATCTCTCCCAGATCTCTCAGAACCTTGAGCTTGGGAATTGAACTGG
GGTCACCTGTGTCTTTCTTATGGACTCGCAGGATTTTAGAACCTTAATGCACCTTGAGGGTAGCTGGGCCAGA
CTTCTCATTTTACAGGTGAGGAGACTGGTGCCCCACAGGGATTAAGTGCTTGCCCAAGGTCAGGCTTATCTCCA
GAGGGAGGTGCCCTGGACTGGGGCCCAGATGTTTCAAGGACCTGCCTACACCTCATTTCAGTGTTGGGCTGCCTT
AGTTAGTTATGAGAACAGGGAAGGGCTGGGAAGAGACAGCCTCCAAGGTCAACACTTGAGAGGGGTTTCACTTGC
TCTGAAGACCTTGGTCCAGGATTGCGCCTCTCCCATGCCTTCAAGTCAGCATCAGGCTTAGGGCAAAGACCAGGC
CTCTGAAGCTGCCTCTTGTAATTCATGCAGGAAGATGTCAAAGTCAGCCCCATCTTGGCTGATCAGGGTGTTTCA
CCTTAACCCACCTGTGTTCTGAAGTCTCTTACCCTACCTGCTCAGGACTGAGACAGTTATTCACTGAACATATT
TATTAAGCACTTGCTGTAGGCCAACAGTTAAGAATCCAATAATGAAATGGACAGATTATGGAACCTAGAGTCCA
ATAGGAAAGTGAGACCCAGACAATGACAATGAGATAAATGTTAGGAAGGGGGAGGTATGGGGTGACTTCCCTGCA
GTCCTGGGGGCTTAGATGGGCCCCAAGACTGGGTGAGAGTCTTGGCAGAGCCTTTCGAACACCTTAAGTGGACAGG
ACTGGGAGGTCTTGGTGGTTGGAGCCAACGIGGGTTCCCTGCGGCTCCTTAGTCACCTCTGATAGCAGATTGAGG
GAGGAAAACAGGTAAGGCATGAGGAAATGGCCAGGTTGGGTAAACCACTGGTTTCAACCAAGTTCAGGAATGAGG
TTATTTGGCCATGACTGGCTGATCTTGAGCTCAAGGATCTGCTTCAAATGCACACAGGCCTAGTTGAAGTTTAAA
CCCCAGCAAAACATTCCCTCCCTGTAAATGGAAAATCCTACTTCTACCCCCACCCTGCCCTGTTTTTTGTTTTTTT
TTTCCCCAAGATCATTAGATGTCTCACCCCTCCTCACTGCCTCTCCTCTCTGAGGACAGGCTGGGACCTTTGAGG
AAGATAAAGCCTTCCCTTCACTACCCATCATATTAGTGTCCTGTTCCCTCACTCAGAGAGGAAGGCAGAACCAGT
CAGGCTTATTTAGTAAGTTCCACAGTTCTACAAGACTGCAGGAATTCTCCTTAAGGGAGGAGAGCAAGCAGGTG
TGGCCCCAGCTTCTGGAAATGGCAGAAGAGAGGGTTTTCTCATTGAATGGGGTGGGGGCTCGTGTGTCTCTGGGA
AACCCCATCAGTCCCTTCAATTTCTTGAGACTCAACTCCTGGGAGGAGAGGGTCTCAAGAGTTGTCCTGGAAGGA
GGGCGGGGGCAGTCTGCATCTATTTAGGTTGTGGCTCTTGGTTCTAGGACTCTTACTTCTCTGGCTAAGGGCTC
AGCTTCTTGGGACTTCAACCATCTTCTTTCTGAAAGACCAATCTAATGTAACAGTAACGTGAGGACTGCCAAG
TATGGCTTTGTCCCTATGACTCAGAGGAGGGTTTTGTGCGGCAAATTCAGGTGGATGAAGTATGTGTGTGCGTGTG
CATGGGAGTGTGCGTGGACTGGGATATCATCTCTACAGCCTGCAAATAAACAGACAACTT

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FIGURE 2819A

ATGGGGCAGCAGCCTGGAAAAGTACTTGGGGACCAAGAAGGCCAAGCTTGCCCTGCCCTGCATTTTATCAAAGGA
GCAGGGAAGAAGGAATCATCGAGGCATGGGGGTCCACACTGCAATGTTTTTGTGGAACAAGCCCTTCAGCGGCCA
GTAGCATCTGACTTTGAGCCTCAGGGTCTGAGTGAAGCCGCTCGTTGGAACCTCAAGGAAAACCTTCTCGCTGGA
CCCAGTGAAGTACCCCAACCTTTTTCGTTGCACTGTATGATTTTGTGGCCAGTGGAGATAACACTCTAAGCATA
ACTAAAGGTGAAAAGCTCCGGGTCTTAGGCTATAATCACAATGGGGAATGGTGTGAAGCCCAACCAAAAATGGC
CAAGGCTGGGTCCCAAGCAACTACATCACGCCAGTCAACAGTCTGGAGAAACACTCCTGGTACCATGGGCCTGTG
TCCCGCAATGCCGCTGAGTATCTGCTGAGCAGCGGGATCAATGGCAGCTTCTTGGTGCCTGAGAGTGAGAGCAGT
CCTGGCCAGAGGTCCATCTCGCTGAGATACGAAGGGAGGGTGTACCATTACAGGATCAACACTGCTTCTGATGGC
AAGCTCTACGTCTCCTCCGAGAGCCGCTTCAACACCCTGGCCGAGTTGGTTCATCATCATTCAACGGTGGCCGAC
GGGCTCATCACCACGCTCCATTATCCAGCCCCAAAGCGCAACAAGCCCACTGTCTATGGTGTGTCCCCAACTAC
GACAAGTGGGAGATGGAACGCACGGACATCACCATGAAGCACAAGCTGGGCGGGGGCCAGTACGGGGAGGTGTAC
GAGGGCGTGTGGAAGAAATACAGCCTGACGGTGGCCGTGAAGACCTTGAAGGAGGACACCATGGAGGTGGAAGAG
TTCTTGAAAAGAAGCTGCAGTCATGAAAGAGATCAAACACCCTAACCTGGTGCAGCTCCTTGGGGTCTGCACCCGG
GAGCCCCGTTCTATATCATCACTGAGTTCATGACCTACGGGAACCTCCTGGACTACCTGAGGGAGTGCAACCGG
CAGGAGGTGAACGCCGTGGTGTGCTGTGTACATGGCCACTCAGATCTCGTCAGCCATGGAGTACCTGGAGAAGAAA
AACTTCATCCACAGAGATCTTGCTGCCCCGAAACTGCCTGGTAGGGGAGAACCACTTGGTGAAGGTAGCTGATTTT
GGCCTGAGCAGGTTGATGACAGGGGACACCTACACAGCCCATGCTGGAGCCAAGTCCCCATCAAATGGACTGCA
CCCAGAGCCTGGCCTACAACAAGTTCTCCATCAAGTCCGACGTCTGGGCATTTGGAGTATTGCTTTGGGAAATT
GCTACCTATGGCATGTCCCCTTACCCGGGAATTGACCTGTCCCAGGTGTATGAGCTGTAGAGAAGGACTACCGC
ATGGAGCGCCCAGAAGGCTGCCAGAGAAGGTCTATGAACTCATGCGAGCATGTTGGCAGTGGAAATCCCTCTGAC
CGGCCCTCCTTTGCTGAAATCCACCAAGCCTTTGAAACAATGTTCCAGGAATCCAGTATCTCAGACGAAGTGGAA
AAGGAGCTGGGGAAACAAGGCGTCCGTGGGGCTGTGAGTACCTTGTGTCAGGCCCCAGAGCTGCCCCACCAAGACG
AGGACCTCCAGGAGAGCTGCAGAGCACAGAGACACCACTGACGTGCCTGAGATGCCTCACTCCAAGGGCCAGGGA
GAGAGCGATCCTCTGGACCATGAGCCTGCCGTGTCTCCATTGCTCCCTCGAAAAGAGCGAGGTCCCCCGGAGGGC
GGCCTGAATGAAGATGAGCGCCTTCTCCCCAAAGACAAAAGACCAACTTGTTCAGCGCCTTGATCAAGAAGAAG
AAGAAGACAGCCCCAACCCCTCCCAAACGCAGCAGCTCCTTCCGGGAGATGGACGGCCAGCCGGAGCGCAGAGGG
GCCGGCGAGGAAGAGGGCCGAGACATCAGCAACGGGGCACTGGCTTTTACCCCTTGGACACAGCTGACCCAGCC
AAGTCCCCAAAGCCAGCAATGGGGCTGGGGTCCCCAATGGAGCCCTCCGGGAGTCCGGGGGCTCAGGCTTCCGG
TCTCCCCACCTGTGGAAGAGTCCAGCACGCTGACCAGCAGCCGCTAGCCACCGGCGAGGAGGAGGGCGGTGGC
AGCTCCAGCAAGCGCTTCTGCGCTCTTGCTCCGCTCCTGCGTTCCCATGGGGCCAAGGACACGGAGTGGAGG
TCAGTCACGTGCCTCGGGACTTGCACTCCACGGGAAGACAGTTTGACTCGTCCACATTTGGAGGGCACAAAAGT
GAGAAGCCGGCTCTGCCTCGGAAGAGGGCAGGGGAGAACAGGTCTGACCAGGTGACCCGAGGCACAGTAACGCCT
CCCCCAGGCTGGTGAAGAAATGAGGAAGCTGCTGATGAGGTCTTCAAAGACATCATGGAGTCCAGCCCGGGC
TCCAGCCCGCCCAACCTGACTCCAAAACCCCTCCGGCGGCAGGTACCGTGGCCCTGCCTCGGGCCTCCCCAC
AAGGAAGAAGCTGGAAGGGCAGTGCCTTAGGGACCCCTGCTGCAGCTGAGCCAGTGACCCCCACCAGCAAAGCA
GGCTCAGGTGCACCAGGGGGCACCAGCAAGGGCCCCGCGAGGAGTCCAGAGTGAGGAGGCACAAGCACTCCTCT
GAGTCGCCAGGGAGGGACAAGGGGAAATTGTCCAGGCTCAAACCTGCCCGGCCGCCCCACCAGCAGCCTCTGCA
GGGAAGGCTGGAGGAAAGCCCTCGCAGAGCCCCGAGCCAGGAGGCGGCCGGGGAGGCAGTCTTGGGCGCAAAGACA
AAAGCCACGAGTCTGGTTGATGCTGTGAACAGTGACCGTGCACAGCTGCCAAGCCAGCCAGCCGGGAGAGGGCCTCAAAG
CCCGTGTCTCCCGCCACTCCAAAGCCACAGTCCGCAAGCCGTGGGGACCCCATCAGCCAGCCCCCGTTCC
TCCACGTTGCCATCAGCATCCTCGGCCCTGGCAGGGGACCGGCTCTTCCACCGCCTTCATCCCTCTCATATCA
ACCCGAGTGTCTCTTCGGAAGAACCCGCCAGCCTCCAGAGCGGATCGCCAGCGGCGCCATCACCAGGGCGTGGTC
CTGGACAGCACCGAGGCGCTGTGCCTCGCCATCTCTAGGAACCTCGAGCAGATGGCCAGCCACAGCGAGTGTG
GAGGCCGGCAAACCTCTACACGTTCTGCGTGAGCTATGTGGATTCCATCCAGCAAATGAGGAACAAGTTTGGC
TTCCGAGAGGCCATCAACAACTGGAGAATAATCTCCGGGAGCTTCAGATCTGCCCGGCGCAGGACGGCAGTGGT
CCAGCGGCCACTCAGGACTTCAGCAAGCTCCTCAGTTCCGTGAAGGAAATCAGTGACATAGTGACAGGTAGCAG
CAGTCAGGGGTGAGGTGTGAGGCCGTCGGAGCTGCCTGCAGCACATGCGGGCTCGCCCATACCCGTGACAGTGG
CTGACAAGGGACTAGTGAGTCAGCACCTTGGCCAGGAGCTCTGCGCCAGGCAGAGCTGAGGGCCCTGTGGAGTC

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FIGURE 2819B

CAGCTCTACTACCTACGTTTGCACCGCCTGCCCTCCCGCACCTTCCTCCTCCCCGCTCCGTCTCTGTCTCGAAT
TTTATCTGTGGAGTTCCCTGCTCCGTGGACTGCAGTCGGCATGCCAGGACCCGCCAGCCCCGCTCCCACCTAGTGC
CCCAGACTGAGCTCTCCAGGCCAGGTGGGAACGGCTGATGTGGACTGTCTTTTTCATTTTTTTCTCTCTGGAGCC
CCTCCTCCCCCGCTGGGCCTCCTTCTTCCACTTCTCCAAGAATGGAAGCCTGAACTGAGGCCTTGTGTGTGAGG
CCCTCTGCCTGCACTCCCTGGCCTTGCCCGTCGTGTGCTGAAGACATGTTTCAAGAACCGCATTTTCGGGAAGGGC
ATGCACGGGCATGCACACGGCTGGTCACTCTGCCCTCTGCTGTGCTGCCCGGGGTGGGGTGCCTCGCCATTTCTC
ACGTGCAGGACAGCTCTTGATTTGGGTGGAACAGGGGTGCTAAAGCCAACCAGCCTTTGGGTCTGGGCAGGTG
GGAGCTGAAAAGGATCGAGGCATGGGGCATGTCCTTTCCATCTGTCCACATCCCCAGAGCCCAGCTCTTGCTCTC
TTGTGACGTGCACTGTGAATCCTGGCAAGAAAGCTTGAGTCTCAAGGGTGGCAGGTCACTGTCACTGCCGACATC
CCTCCCCCAGCAGAATGGAGGCAGGGGACAAGGGAGGCAGTGGCTAGTGGGGTGAACAGCTGGTGCCAAATAGCC
CCAGACTGGGCCCAGGCAGGTCTGCAAGGGCCCAGAGTGAACCGTCCTTTACACATCTGGGTGCCCTGAAAGGG
CCCTTCCCCCTCCCCCACTCCTCTAAGACAAAGTAGATTCTTACAAGGCCCTTTCTTTTGAACAAGACAGCCTTC
ACTTTTCTGAGTTCTTGAAGCATTTCAAAGCCCTGCCTCTGTGTAGCCGCCCTGAGAGAGAATAGAGCTGCCACT
GGGCACCTGCGCACAGGTGGGAGGAAAGGGCCTGGCCAGTCCTGGTCCTGGCTGCACTCTTGAAGTGGGCGAATG
TCTTATTTAATTACCGTGAGTGACATAGCCTCATGTTCTGTGGGGGTCTCAGGGAGGGTTAGGAAAACCACAAA
CGGAGCCCCCTGAAAGCCTCACGTATTTACAGAGCACGCCTGCCATCTTCTCCCCGAGGCTGCCCCAGGCCGGAG
CCCAGATACGGGGGCTGTGACTCTGGGCAGGGACCCGGGGTCTCCTGGACCTTGACAGAGCAGCTAACTCCGAGA
GCAGTGGGCAGGTGGCCGCCCTGAGGCTTACGCCGGGAGAAGCCACCTTCCCACCCCTTCATACCGCCTCGTG
CCAGCAGCCTCGCACAGGCCCTAGCTTTACGCTCATCACCTAAACTTGTACTTTATTTTTCTGATAGAAATGGTT
TCCTCTGGATCGTTTTATGCGGTTCTTACAGCACATCACCTCTTTGCCCCCGACGGCTGTGACGCAGCCGGAGGG
AGGCACTAGTCACCGACAGCGGCCTTGAAGACAGAGCAAAGCGCCACCCAGGTCCCCGACTGCCTGTCTCCAT
GAGGTACTGGTCCCTTCCTTTTGTAAAGTGATGTGCCACTATATTTTACACGTATCTCTTGGTATGCATCTTTT
ATAGACGCTCTTTTCTAAGTGGCGTGTGCATAGCGTCCTGCCCTGCCCCCTCGGGGGCCTGTGGTGGCTCCCCCT
CTGCTTCTCGGGGTCCAGTGCATTTTGTCTGTATATGATTCTCTGTGGTTTTTTTTTGAATCCAAATCTGTCTT
CTGTAGTATTTTTTAAATAAATCAGTGTTTACATTAG

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FIGURE 2820

GGCACGAGGAGATGGCGATGGAGATGAGGCTTCCAGTGGCTCGCAAGCCTCTTAGCGAGAGACTGGGCCGCGACA
CTAAGAAACATCTAGTGGTGCCGGGGGATACAATCACTACGGACACAGGATTCATGCGGGGCCATGGAACGTATA
TGGGAGAAGAGAAGCTCATTGCATCTGTTGCTGGCTCTGTGGAGAGAGTAAACAAGTTGATCTGTGTGAAAGCTT
TGAAAACCAGATACATTGGTGAAGTAGGAGACATCGTAGTGGGACGAATCACAGAGGTTCAACAGAAGAGGTGGA
AGGTGGAGACCAACTCCAGGCTGGATTGCGTCTTGCTGCTCTCGTCCATGAACCTTCCTGGAGGAGAGCTGAGGA
GAAGATCTGCAGAAGATGAGCTTGCAATGAGAGGTTTCTTACAGGAAGGGGACCTTATCAGTGCTGAGGTCCAGG
CAGTGTTCTCTGACGGAGCTGTCTCTTTGCACACGAGGAGCCTGAAATATGGAAGCTAGGTGAGGGGGTTTTGG
TCCAGGTTTCCCCCTCCCTGGTGAAACGGCAGAAGACCCACTTTTCATGATTTGCCATGTGGTGCCCTCAGTGATTC
TCGGTAACAACGGCTTCATCTGGATTTACCCAACACCTGAGCACAAAGAAGAGGAAGCAGGGGGCTTCATTGCAA
ACCTGGAGCCTGTCTCTCTTGCTGATCGAGAGGTGATATCCCGGCTTCGGAAGTGCATCATCTCGCTGGTAACTC
AGAGGATGATGCTGTATGATACCAGCATCCTGTACTGCTATGAAGCATCCCTTCCACATCAGATCAAAGACATCT
TAAAGCCAGAAATAATGGAGGAGATTGTGATGGAACACGCCAGAGGCTTTTGAACAGGAGGGATTAAGGAGGTG
CTCCAGAAGCACGGGACTGTGGACCTTGACAGGAGTGAAGACTGTGATGTGTGGTCCCCATATGTGGCTCAGCAAA
GACTCGAGAGATCATCCCTTTGCTGCAATTGACGGCCCTGTGACGGCCTCCAGCCCACAGGCCTGCTTTCTCCTG
TCCTAACACCAAGCCTGGGTGGCAGATGAACAGTGCTTCCTTGGGTTGCCAGCTGAGTCCCGGTATTAGGGAATA
GTTTCAGCTCTTTCAAAGTGCACAGTGTTACAGTCGAATGGGCTCCCATCCTGGAATAATATGGAGAATCCTTTG
TCTTCCACTCACTGTCATTACAAAGGCACAGTGCCCCATGAAATTGCCCAATAGAAAACATGGCATCCCTGACC
TCCAAATGGTCTGTTTTGGCCTCCATTCTATATCCTTTAAATGACTGAGAATGCAGCTGGTAAAGTTGGAAGAA
TAAAGTTAACCAAGCAGGCCAGGCACGGTGGCTCACGCCTATAATCCCAGCACTTAGGGAGGCCAAGGCGGGCAG
ATCACCTGAGGTCAATAGTTCGAGACCAGCCTGGCCAACAAGGTGAAACCCCATCTCTACTAAAAATACAAAAA
TTAGCCAGGTGTGGTGGTGTGCACCTGTAGTCCCAGCTATTTGGGAGGCTGAGGTGGGAGAATCATTGAACCTG
GGAGGCGGAGGTTGCAGTGAGCTGAAATCGCGTACCACACTCCAGCCTGGGTGACAGAGCGAGACTGTGTTTCAA
AGAAAAAAAAAAAAACAAGCAGCCTTTTGCTTGGTTGGAATCTGATTTTCTGTTGCGTGTTCTTGTAGCCATAGAT
GTGATTATGTCCACACCGGGCTGCCTTAATCTGTCTGCTTGGAGAGTGACTTGTAAGATGCTGAATTATTCATG
ATAATACAGTGAATGTTCTGGGTCCATGTACTCAGATAAACATGAAGAAAATAAGCAAAGAAAAATGGAGACTGG
GAAAGCAAAGCTGTTTTATCCTATAATTGAAGTAGTGTGGAGCATTAACTTGTGGATGATTCAGAGTTAAAGA
TAAAAAGACGCCAGAGTTCTCGCTGAAGAATGTGAGAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2821

MAMEMRLPVARKPLSERLGRDTKKHLVVPDITITDTGFMRGHTYMGEKLIASVAGSVERVNKLICVKALKTR
YIGEVGDIVVGRITEVQQKRWKVETNSRLDSVLLLSMNLPGGELRRRSAEDELAMRGFLQEGDLISAEVQAVFS
DGA VSLHTRSLKYGKLGQGVLVQVSPSLVKRQKTHFDLP CGASVILGNNGFIWIYPTPEHKEEEAGGF IANLEP
VSLADREVISRLRNCIISLVTQRMMLYDTSILYCYEASLPHQIKDILKPEIMEEIVMETRQRLLEQEG

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FIGURE 2822

GGCACGAGGCTTATAACCTGGGATGGGCACCCCTGCCAGTCCTGCTCTGCCGCCTGCCACCGCTGCCCGAGCCCG
ACGCTATGTCAGCAAAGGCTCCGTGGTTCTGGCCTACAGTGGCGGCCTGGACACCTCGTGCATCCTCGTGTGGC
TGAAGGAACAAGGCTATGACGTCATTGCCTATCTGGCCAACATTGGCCAGAAGGAAGACTTCGAGGAAGCCAGGA
AGAAGGCACTGAAGCTTGGGGCCAAAAAGGTGTTTATTGAGGATGTCAGCAGGGAGTTTGTGGAGGAGTTTCATCT
GGCCGGCCATCCAGTCCAGCGCACTGTATGAGGACCGCTACCTCCTGGGCACCTCTCTTGGCAGGCCCTGCATCG
CCCGCAAACAAGTGGAATCGCCAGCGGGAGGGGGCCAAGTATGTGTCCCACGGCGCCACAGGAAAGGGGAACG
ATCAGGTCCGGTTTGTAGCTCAGCTGCTACTACTGGCCCCCAGATAAAGGTCATTGCTCCCTGGAGGATGCCTG
AATTCTACAACCGGTTCAAGGGCCGCAATGACCTGATGGAGTACGCAAAGCAACACGGGATTCCCATCCCGGTCA
CTCCAAGAACCCGTGGAGCATGGATGAGAACCTCATGCACATCAGCTACGAGGCTGGAATCCTGGAGAACCCCA
AGAACCAAGCGCCTCCAGGTCTCTACACGAAGACCCAGGACCCAGCCAAAGCCCCAACACCCCTGACATTCTCG
AGATCGAGTTCAAAAAAGGGTCCCTGTGAAGGTGACCAACGTCAAGGATGGCACCACCCACCAGACCTCCTTGG
AGCTCTTCATGTACCTGAACGAAGTCGCGGGCAAGCATGGCGTGGGCCGTATTGACATCGTGGAGAACCGCTTCA
TTGGAATGAAGTCCCGAGGTATCTACGAGACCCAGCAGGCACCATCCTTTACCACGCTCATTTAGACATCGAGG
CCTTCACCATGGACCGGGAAGTGCACAAAATCAAACAAGGCCTGGGCTTGAAATTTGCTGAGCTGGTGTATACCG
GTTTCTGGCACAGCCCTGAGTGTGAATTTGTCCGCCACTGCATCGCCAAGTCCCAGGAGCGAGTGGAAGGGAAAG
TGCAGGTGTCCGTCCCTCAAGGGCCAGGTGTACATCCTCGGCCGGGAGTCCCCACTGTCTCTCTACAATGAGGAGC
TGGTGAGCATGAACGTGCAGGGTGATTATGAGCCAACCTGATGCCACCGGGTTCATCAACATCAATTCCCTCAGGC
TGAAGGAATATCATCGTCTCCAGAGCAAGGTCACTGCCAAATAGACCCGTGTACAATGAGGAGCTGGGGCCTCCT
CAATTTGCAGATCCCCCAAGTACAGGCGCTAATTGTTGTGATAATTTGTAATTGTGACTTGTTCTCCCCGGCTGG
CAGCGTAGTGGGGCTGCCAGGCCCCAGCTTTGTTCCCTGGTCCCCCTGAAGCCTGCAAACGTTGTATCGAAGGG
AAGGGTGGGGGGCAGCTGCGGTGGGGAGCTATAAAAATGACAATTAAGAGACACTAGTCTTTTATTTCTAAAA
AAAAAAAAAAAAAAAAAAAAA

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FIGURE 2823

MSSKGSVVLAYS GGLDTS CILVWLKEQGYDVIAYLANIGQKEDFEEARKKALKLGAKKVFIEDVSREFVEEFIWP
AIQSSALYEDRYLLGTSLARPCIARKQVEIAQREGAKYVSHGATGKGNDQVRFELSCYSLAPQIKVIAPWRMPEF
YNRFKGRNDLMEYAKQHGIPIPVTPKNPWSMDENLMHISYEAGILENPKNQAPPGLYTKTQDPAKAPNTPDILEI
EFKKGVPVKVTNVKDGTHQTSLELFMYLNEVAGKHGVGRIDIVENRFIGMKSRIYETPAGTILYHAHLDEAF
TMDREVRKIKQGLGLKFAELVYTGFWHSPECEFVRHCAKSQERVEGKVQVSVLKGQVYILGRESPLSLYNEELV
SMNVQGDYEPTDATGFININSLRLKEYHRLQSKVTAK

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FIGURE 2824

AAAAATCGAGGCGGGGCTGAGAGGCTGCGGCGGCTGACTAGGTTTTTCGGACCGCGGCGCGGCGGGGAAGAGAGAC
TGCGGCGGGAGGGCCAGGCCGTGGGAGAGACGCGGGAAAGTGCGGGTGCGAGAGGCACCTTGACCACCCCGCCCTA
GGCCGACCCGGCGGACGCGGCGTCTGGTGTGCGGGCGCTGGGGCGGGTCCCAGGTCTCCCCGCTGCGCTGCTTGA
GGCTCAGCCATGGCCAGCAGAGAGCCCTGCCCCAGAGCAAGGAGACGCTGCTGCAGTCCTACAACAAGCGGCTG
AAGGACGACATTAAGTCCATCATGGACAACCTTACCGAGATCATCAAGACCGCCAAGATTGAGGACGAGACGCAG
GTGTCACGGGCCACTCAGGGTGAACAGGACAATTACGAGATGCATGTGCGAGCCGCCAACATCGTCCGAGCCGGC
GAGTCCCTGATGAAGCTGGTGTCCGACCTCAAGCAGTTCTTGATCCTCAATGACTTCCCCCTCCGTGAACGAGGCC
ATTGACCAGCGCAACCAGCAGCTGCGCACACTGCAGGAGGAGTGCAGACCGGAAGCTCATCACGCTGCGAGACGAG
ATCTCCATTGACCTCTACGAGCTGGAGGAGGAGTATTACTCGTCCAGCTCAAGCCTTTGCGAAGCTAATGACCTG
CCTCTGTGCGAAGCTTACGGGAGGCTGGACCTCGACACAGACTCTGCTGATGGCCTCTCGGCCCCCTCTGCTGGCG
TCCCCGAGCCCAAGTGTGGCCCCCTACAGGTGGCAGCCCCCTGCCCACTCCCATGCTGGTGGCCCTGGCCCCACT
GAGCACGCCTGAGCCTCCGGGGCCACGCTTCGTTCTCAGGAACAAAACCTGAGGCAGCCCTTTGGATGCCCTCAC
AGCCTTGCTTCTCTCAGCCTAGGTTCCCATTTGGGGACTTCAGGACCCAGAGCCACTAGGACTTCCTTGGAAG
CCCGTTAGCCCAGGGTGGGTCCCACCAGGACAGTAGGGAAACAGTTGTTTCCCTAGCCATTTCCGAATAGCCCAT
CATTCCGAGTCATCATCTCTGTTTGCTGCCTTCCTGGCCAGCCAGGTGGAAGAAAGTTTCCAAGCTAGGTCTGGC
CCGTTGGGGATCTCAGCAGTGGGGCAGGAGGGTGCCTGATTTGCGGGAGTCCTGACCCGAGCCTGTTGTCAGAGT
TGGGAGGGGCTCTGAGCAGTGTTGGGCAGGCCGGGTCTCCCATCCCGAGGCCAGCGTTCTGTGCAGAGCCCCAT
CCACTGGTTCTTGCCCTGAGCCACATATGTCTGTGCCATGGGCTGAGTGCCACGACAGGCCCGTGTGACAGCTGC
TGCCCCACGCATGTGGAAGCTAGGTGGGACTCATTCCCTAATTCTGCCGTTGTAATGAGACTTGATTAAAACACCGC
CACTTTTTTGC

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FIGURE 2825

GGAGAAGGGAGGGCGCCTGGCTGTATCCCCCGCAGGCCCTCTTCCGAGAGCCTTCCTCCTCGGGCAGTGCGTTCTG
GGGCTGTGCTGCTCCTGTTACCTTCTGAAACCTTCGACCGTTTGAGCTGGAGGGGGCCCTGAGAAATCAGAGTCTA
CGTATCATTCTTACTTAGGGGGAAACTTAGGCTGGAGACAGGGAGGCCCTTCCACTCTGCCCCATTAGCTTAGAAAAT
CAAGATTGAGTCCAGCAGATGCAGAGTCCATGTCCATCTTGTGCCCTTCTCCTGGACAAACCTTTCTTCTGCTGGT
GTGGATTTAAATACTCCTTTCTGCCCCATTGGCCATGCTGGGAGCCACAGCTATCCAGAGCCAGCATGACCTGGG
GCTTGGTTTCCCTGCCCTGGGCTCAGTGGCACTGCTGAGCTGCAGCAGTCCTAGAGTTTTCCAGGGGGTTCTGAG
GGAATCTTTGGTCCCCAGTACTCATTAACCTCAGCAGACATGAGGCAGCATTTCTCCACACTAGGGTGGCTGAGA
GGGGTCTTGGGGTGTTCAGACCCCTTCTGGGCATCTCCTTCCACAGCTGTTTCAGTTTGTGGGTCTCTTTGAGGCA
GCCACCGTCCCTGAGGGCCCCCTGCACAGAGCAGCTGTGGGCCTGTAATTCAGCCTGCCTGCCTTGCCCTTGGGGCA
GGGAGAGAGGGAACTGCTCACGGCCCTGCAGCAGAGCAGGGCGCAAACCCAGGACATCTGTGCCAGGCTTCCCA
TGCCCTCCCCAACAGTCCCTCAGCTTCACCCAGCGGGGCTTCCAGGCCAGCCTGTGTCCCCTCCCGCAGGCCTC
CTGTCCACACCAGCGCCCCCTGGGGGGCCTCACACAGCCCCCTGGCTTTCTCTCTGCCTGCTCCTGTCTCTCCCT
GGGGTTTCTGGTGGTGGAAAAGCTCAAGCCTTTGCGAAGCTAATGACCTGCCTCTGTGCGAAGCTTACGGGAGGC
TGGACCTCGACACAGACTCTGCTGATGGCCTCTCGGCCCTCTGCTGGCGTCCCCGGAGCCAGTGTGGCCCCC
TACAGGTGGCAGCCCCCTGCCACTCCCATGCTGGTGGCCCTGGCCCCACTGAGCACGCCTGAGCCTCCGGGGCCA
CGCTTCGTTCTCAGGAACAAAACCTGAGGCAGCCCTTGGATGCCCTCACAGCCTTGCTTCTCTCAGCC

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FIGURE 2826

TTTCCTTTCTCTCTCCTCCCGCCGCCCAAGATGCCGAAAGGAAAGAAGGCCAAGGGAAAGAAGGTGGCTCCGGCC
CCAGCTGTCGTGAAGAAGCAGGAGGCTAAGAAAGTGGTGAATCCCCTGTTTGAGAAAAGGCCTAAGAATTTTGGC
ATTGGACAGGACATCCAGCCCAAAAGAGACCTCACCCGCTTTGTGAAATGGCCCCGCTATATCAGGTTGCAGCGG
CAGAGAGCCATCCTCTATAAGCGGCTGAAAGTGCCTCCTGCGATTAAACAGTTCACCCAGGCCCTGGACCGCCAA
ACAGCTACTCAGCTGCTTAAGCTGGCCCAAGTACAGACCAGAGACAAAGCAAGAGAAGAAGCAGAGACTGTTG
GCCCCGGCCGAGAAGAAGGCTGCTGGCAAAGGGGACGTCCCAACGAAGAGACCACCTGTCCTTCGAGCAGGAGTT
AACACCGTCACCACCTTGTTGGAGAACAAGAAAGCTCAGCTGGTGGTGATTGCACACGACGTGGATCCCATCGAG
CTGGTTGCTTCTTGCCCTGTGTCGTAAAATGGGGGTCCCTTACTGCATTATCAAGGGAAAGGCAAGACTG
GGACGTCTAGTCCACAGGAAGACCTGCACCACTGTGCGCTTCACACAGGTGAACTCGGAAGACAAAGGCGCTTTG
GCTAAGCTGGTGAAGCTATCAGGACCAATTACAATGACAGATACGATGAGATCCGCCGTCACTGGGGTGGCAAT
GTCCTGGGTCCTAAGTCTGTGGCTCGTATCGCCAAGCTCGAAAAGGCAAAGGCTAAAGAACTTGCCACTAAACTG
GGTTAAATGTACACTGTTGAGTTTTCTGTACATAAAAATAATTGAAATAATACAAATTTTCCTTC

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FIGURE 2827

MPKGKKAKGKKVAPAPAVVKKQEAKKVVNPLFEKRPKNFGIGQDIQPKRDLTRFVKWPRYIRLQRQRAILYKRLK
VPPAINQFTQALDRQTATQLLKLAHKYRPETKQEKQORLLARAEEKKAAGKGDVPTKRPPVLRAGVNTVTTLVENK
KAQLVVIAHDVDPIELVVFLPALCRKMGPYCIKKGARLGRLVHRKTCTTVAFQTQVNSEDKGALAKLVEAIRTN
YNDRYDEIRRHWGGNVLGPKSVARIAKLEKAKAKELATKLG

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FIGURE 2828

GGAGCCGCGAGCCGACGCGGAGCGAGGCCGCGCCGCCGGGCACTTCTGTGGAGGCCGAGCGGGTGCGGGCGCCGA
CGGGCGAGAGCCAGCGAGCGAGCGAGCGAGCCGAGCCGAGCCTCCCGCCGTCGCCATGGGCCAGAACGACCTGAT
GGGCACGGCCGAGGACTTCGCCGACCAGTTCTCTCCGTGTACAAAGCAGTACCTGCCCCACGTGGCGCGCCTCTG
TCTGATCAGCACCTTCTCTGGAGGACGGCATCCGTATGTGGTTCCAGTGGAGCGAGCAGCGCGACTACATCGACAC
CACCTGGAACCTGCGGCTACCTGCTGGCCTCGTCCTTCGTCTTCTCAACTTGCTGGGACAGCTGACTGGCTGCGT
CCTGGTGTGTAGCAGGAACCTCGTGCAGTACGCCTGCTTCGGGCTCTTTGGAATCATAGCTCTGCAGACGATTGC
CTACAGCATTTTATGGGACTTGAAGTTTTTGATGAGGAACCTGGCCCTGGGAGGAGGCCTGTTGCTGCTCCTAGC
AGAATCCCGTTCTGAAGGGAAGAGCATGTTGCGGGCGTCCCCACCATGCGTGAGAGCTCCCCAAACAGTACAT
GCAGCTCGGAGGCAGGGTCTTGCTGGTTCTGATGTTTCATGACCCTCCTTCACTTTGACGCCAGCTTCTTTTCTAT
TGTCAGAACATCGTGGGCACAGCTCTGATGATTTTAGTGGCCATTGGTTTTAAACCAAGCTGGCTGCTTTGAC
TCTTGTGTGTGGCTCTTTGCCATCAACGTATATTTCAACGCCTTCTGGACCATTCCAGTCTACAAGCCCATGCA
TGACTTCTGAAATACGACTTCTTCCAGACCATGTCGGTGATTGGGGCTTGCTCCTGGTGGTGGCCCTGGGCC
TGGGGGTGTCTCCATGGATGAGAAGAAGAAGGAGTGGTAACAGTCACAGATCCCTACCTGCCTGGCTAAGACCCG
TGGCCGTCAAGGACTGGTTCGGGGTGGATTCAACAAAACCTGCCAGCTTTTATGTATCCTCTTCCCTTCCCTCCC
TTGGTAAAGGCACAGATGTTTTGAGAACTTTATTTGCAGAGACACCTGAGAATCGATGGCTCAGTCTGCTCTGGA
GCCACAGTCTGGCGTCTGACCCTCAGTGCAGGCCAGCCTGGCAGCTGGAAGCCTCCCCACGCCGAGGCTTTGG
AGTGAACAGCCCGCTTGGCTGTGGCATCTCAGTCTATTTTTGAGTTTTTTTGTGGGGGTACAGGAGGGGGCCTT
CAAGCTGTACTGTGAGCAGACGATTGGTATTATCATTCAAAGCAGTCTCCCTCTTATTTGTAAGTTTACATTTT
TAGCGGAACTACTAAATATTTTGGGTGGTTTCAAGCAACCTCAAACAGTTAATCTCCCTGGTTTTAAATCAC
ACCAGTGGCTTTGATGTTGTTCTGCCCCGATTGTATTTTATAGGAATAGTGAACATTTAGGGACACCCAAA
GAATGATGCAGTATTAAGGGGTGGTAGAAGCTGCTGTTTATGATAAAAGTCATCGGTGAGAAAATCAGCTTGG
TTGGTGCCAAGTGTTTTATTGGGTAACACCCTGGGAGTTTTAGTAGCTTGAGGCAAGGTGGAGGGGCAAGAAGTC
CTTGGGGAAGCTGCTGGTCTGGGTGCTGCTGGCCTCCAAGCTGGCAGTGGGAAGGGCTAGTGAGACCACACAGGG
GTAGCCCCAGCAGCAGCACCCTGCAAGCCAGCCTGGCCAGCTGCTCAGACCAGCTTGAGAGCCGCGAGCCGCTGT
GGGCAGGGGGTGTGGCAGGAGCTCCAGCACTGGAGACCCACGGACTCAACCCAGTTACCTCACATGGGGCCTTT
TCTGAGCAAGGTCTCGAAAAGCGCAGGCCGCCCTGGCTGAGCAGCACCGCCCTTTCCAGCTGCACTCGCCCTGTG
GACAGCCCCGACACACCACTTTCTGAGGCTGTGCTCACTCAGATTGTCCGTTTGCTATGCCGAATGCAGCCAA
AATTCCTTTTTACAATTTGTGATGCCTTACCGATTTGATCTTAATCCTGTATTTAAAGTTTTCTAACACTGCCTT
ATACTGTGTTTCTCTTTTTGGGGGAGCTTAACTGCTTGTGTCTCCCTGTCTGCTGCACCATAGTAAATGCCACAA
GGGTAGTCGAACACCTCTCTGGCCCCCTAGACCTATCTGGGGACAGGCTGGCTCAGCCTGTCTCCAGGGCTGCTGC
GGCCAGCCCCGAGCCTGCCTCCCTCTTGGCCTCTCATCCATTGGCTCTGCAGGGCAGGGGTGAGGCAGGTTTCT
GCTCATAAGTGCTTTTGGAAGTCACCTACCTTTTTAACACAGCCGAAGTCCCAACGCGTTTGCAATATTCC
CCTGGTAGCCTACTTCTTACCCCCGAATATTGGTAAGATCGAGCAATGGCTTCAGGACATGGGTTCTCTTCTCC
TGTGATCATTCAAGTGCTCACTGCATGAAGACTGGCTTGTCTCAGTGTTCACCTCACCAGGGCTGTCTCTTG
TCCACACCTCGCTCCCTGTTAGTGCCGTATGACAGCCCCATCAAATGACCTTGGCCAAGTCACGGTTTCTCTGT
GGTCAAGGTTGGTTGGCTGATTGGTGGAAGTAGGGTGGACCAAGGAGGCCACGTGAGCAGTCAGCACCAGTTC
TGCACCAGCAGCGCCTCCGTCTAGTGGGTGTTCTGTTTCTCCTGGCCCTGGGTGGGCTAGGGCCTGATTCGGG
AAGATGCCTTTGCAGGGAGGGGAGGATAAGTGGGATCTACCAATTGATTCTGGCAAAACAATTTCTAAGATTTTT
TTGCTTTATGTGGGAAACAGATCTAAATCTCATTATTTATGCTGTATTTTATATCTTAGTTGTGTTGAAAACGTTT
TGATTTTTTGAAACACATCAAAATAAATAATGGCGTTTGTGTAAAAA

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FIGURE 2829

MGQNDLMGTAEDFADQFLRVTKQYLPHVARLCLISTFLEDGIRMWFQWSEQRDYIDTTWNCGYLLASSFVFLNLL
GQLTGCVLVLSRNFVQYACFGLFGIIALQTIAYSILWDLKFLMRNLALGGGLLLLAESRSEGKSMFAGVPTMRE
SSPKQYMLGGRVLLVLMFMTLLHFDASFFSIVQNIVGTALMILVAIGFKTKLAALTLVVWLFAINVYFNAFWTI
PVYKPMHDFLKYDFFQTMSVIGLLLVALGPGGVSMDEKKKEW

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FIGURE 2830

ACCCAGCCATGCCCGCCCTCAGTCGCTGGGCCAGCCTGCCCGCCCCAGCATGCGGGAGGCAGCCTTCATGTAC
AGCACAGCAGTGGCCATCTTCTGGTCATCTGGTGGCCGCACTGCAGGGCTCGGCTCCCCGTGAGAGCCCCCTC
CCCTATCACATCCCCCTGGACCCGGAGGGGTCCCTGGAGCTCTCATGGAATGTCAGCTACACCCAGGAGGCCATC
CATTTCCAGCTCCTGGTGC GGAGGCTCAAGGCTGGCGTCTGTTTGGGATGTCCGACCGTGGCGAGCTTGAGAAC
GCAGATCTCGTGGTGCTCTGGACCGATGGGGACACTGCCTATTTTGGGACGCCTGGAGTGACCAGAAGGGGCAG
ATCCACCTGGATCCCCAGCAGGACTACCAGCTGCTGCAGGTGCAGAGGACCCAGAAAGGCCTGACCCTGCTTTTC
AAGAGGCCCTTTGGCACCTGCGACCCCAAGGATTACCTCATTGAGGACGGCACTGTCCACTTGGTCTACGGGATC
CTGGAGGAGCCGTTCGGTCACTGGAGGCCATCAACGGCTCGGGCCTGCAGATGGGGCTGCAGAGGGTGCAGCTC
CTGAAGCCCAATATCCCCGAACCGGAGTTGCCCTCAGACGCGTGCACCATGGAGGTCCAAGCTCCCAATATCCAG
ATCCCCAGCCAGGAGACCAGTACTGGTGCTACATTAAGGAGCTTCCAAAGGGCTTCTCTCGGCACCACATTATC
AAGTACGAGCCCATCGTCACCAAGGGCAATGAGGCCCTTGTCACCACATGGAAGTCTTCCAGTGC GCGCCCCGAG
ATGGACAGCGTCCCCACTTCAGCGGGCCCTGCGACTCCAAGATGAAACCCGACCGCCTCAACTACTGCCGCCAC
GTGCTGGCCGCTGGGCCCTGGGTGCCAAGGCATTTTACTACCCAGAGGAAGCCGGCTTGCTTCGGGGGTCCA
GGGTCTCCAGATATCTCCGCTGGAAGTTCACTACCACAACCCACTGGTGATAGAAGGACGAAACGACTCCTCA
GGCATCCGCTTGTA CTACACAGCCAAGCTGCGGCGCTTCAACGCGGGGATCATGGAGCTGGGACTGGTGTAACG
CCAGTGATGGCCATTCCACCAGGGAGACCGCTTCATCCTCACTGGCTACTGCACGGACAAGTGCACCCAGCTG
GCACTGCCTCCCTCCGGATCCACATCTTCGCTCTCAGCTCCACACACACCTGACTGGGAGAAAGGTGGTACA
GTGCTGGTCCGGGACGGCCGGGAGTGGGAGATCGTGAACCAGGACAATCACTACAGCCCTCACTTCCAGGAGATC
CGCATGTTGAAGAAGGTGCTGTCGGTCCATCCGGGAGATGTGCTCATCACCTCCTGCACGTACAACACGGAAGAC
CGGGAGCTGGCCACAGTGGGGGGCTTCGGGATCCTGGAGGAGATGTGTGTCAACTACGTGCACTACTACCCCCAG
ACGCACTGGAGCTCTGCAAGAGCGCTGTGGACGCCGGCTTCCTGCAGAAGTACTTCCACCTCATCAACAGGTTT
AACAACGAGGATGCTGCACCTGCCCTCAGGCGTCCGTGTCTCAGCAGTTACCTCTGTTCCCTGGAACCTCCTT
AACC GCGACGTACTGAAGGCCCTGTACAGCTTCGCGCCCATCTCCATGCACTGCAACAAGTCTCAGCCGTCCGC
TTCCAGGGTGAATGGAACCTGCAGCCCCCTGCCCAAGGTTCATCTCCACACTGGAAGAGCCACCCACAGTGCCCC
ACCAGCCAGGGCCGAAGCCCTGCTGGCCCCACCGTTGTGAGCATTGGTGGGGGGCAAAGGCTGAGAGGGGGACCTAC
TCCTCCCCCTCCTCCATGCTGTCCCTGTGGGCTCACACCGGCACTGTGCACTCTACTCTGCGACGATCCCCATGG
AACAGCCCTGCACGCCCAGGATGAAGGGGGCCAGACCACGCCCCCTGCCTGAGACCACGGTCCAATCCAGCCTTCTT
CCCCCAGGGTCCCCTGCATGGCTGAGAGGGTGTGGGTGCCCTGTTGACCTACCCTGGACCGAGTGGACCACGACC
TCGTCCATTTAAACCCGGCTGACTCAGTGAGGGACAGCCTGCACAGTGGTCCAGGGTCCAGCCCTCCGCCAGCC
CTGTTCCGCTCACTGGGTGTGGCTGGCTTCTGGGACAGGCACCATGCTGGGCCGGGGTGTGGAATCACCGGGA
ACGCCCCCGCCCCGCCCCGCTGCTCCCGGTGTGCAGCGGGTGC GGGTGCCGCTTAAACATTTCCCTGCTGAGTG
GCTCGTGTTCACAGTGGGCGGCTTCCCTGCGACGGAGGCAGGACCAGGCATTTAGCTAGTTAGAGACTCGCCTG
GGAAATTGCTCCATTCTGAGTAAACAGATATTTTCGCCACCTAAAGGGAAGCCCTGACAACAATATCACCAA
AAGACGAGGCGGCAAAGATCCAGCGGGGCTTCTGGGCGCCGGTTCCACGTGGGGTGGAAATTATTAGCACCAGCTT
GCTTCTTGCCGGTGGGGCCAGCGCTGAACAGACCGGGGTGGAGTCAGGGCTGTGCTTTCCGCGTGGTTCTGCCA
CTTAGGGAGTGTGCTTGGGCGGGCCATTTACATTCTGACCCTCACTTTTCTCATCTGTAAACCAGGCTGAT
GCCGTGCGGGCTAATGAGCCAATAAAGCTCACACTTGGGCTGGCACCCACTGGAGGTGGG

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FIGURE 2831

MREAAFMYSTAVAI FLVILVAALQGSAPRESPLPYHIPLDPEGSLELSWNVSYTQEAIHFQLLVRRRLKAGVLFGM
SDRGELNADLVVLWTDGDTAYFADAWSDQKGQIHLDPQQDYQLLQVQRTPEGLTLLFKRPFGTCDPKDYLIEDG
TVHLVYGILEEPFRSLEAINGSLQMGLQRVQLLKPNIPPELP SDACTMEVQAPNIQIP SQETTYWCYIKELPK
GFSRHHIIKYEPIVTKGNEALVHHMEVFQCAPEMDSVPHFSGPCDSKMKPDRLNYCRHVLA AWALGAKAFYYPEE
AGLAFGGPGSSRYLRLEVHYHNPLVIEGRNDSSGIRLYYTAKLRRFNAGIMELGLVYTPVMAIPPRETAFILTGY
CTDKCTQLALPPSGIHIFASQLHTHLTGRKVVTVLVRDGREWEIVNQDNHYSPHFQEIRMLKKVVSVHPGDVLIT
SCTYNTEDRELATVGGFGILEEMCVNYVHYYPQTQLELCKSAVDAGFLQKYFHLINRFNNEDEVCTCPQASVSQQF
TSVPWNSFN RDVLKALYSFAPISMHCNKSSAVRFQGEWNLQPLPKVISTLEETPQCPTSQGRSPAGPTTVVSIGG
GKG

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FIGURE 2832A

GATTTCTCCACCCAGGTGAACCTCCTCCCTCACCTCCCCGACGGGGCGAGGCTCCATGGCTGCCCCCTCGCTGCAC
CCGTCCTTGGGGCCTGGCATCGGCTCCCCGGGACAGCTGCATTCTCCCATCAGCACCTGAGCTCCCCCATCAAC
GGCATGGGCCCCGCTTTCTCGGTTCATCAGCTCCCCCATGGGCCCCCACTCCATGTCGGTGCCCCACACCCACC
CTGGGCTTCAGCACTGGCAGCCCCAGCTCAGCTCACCTATGAACCCCGTCAGCAGCAGCGAGGACATCAAGCCC
CCCCGCTGGGCTCAATGGCGTCTCTCAAGGTCCCCGCCACCCCTCAGGAAACATGGCTTCTTACCAAGCACATC
TGCGCCATCTGCGGGGACCGCTCTCAGGCAAGCACTATGGAGTGTACAGCTGCGAGGGGTGCAAGGGCTTCTTC
AAGCGGACGGTGCGCAAGGACCTGACCTACACCTGCCGCGACAACAAGGACTGCCTGATTGACAAGCGGCAGCGG
AACCGGTGCCAGTACTGCCGCTACCAGAAGTGCCTGGCCATGGGCATGAAGCGGGAAGCCGTGCAGGAGGAGCGG
CAGCGTGGCAAGGACCGGAACGAGAATGAGGTGGAGTGCAGCAGCAGCGCAACGAGGACATGCCGGTGGAGAGG
ATCCTGGAGGCTGAGCTGGCCGTGGAGCCCCAAGACCGAGACCTACGTGGAGGCAACATGGGGCTGAACCCAGC
TCGCCAAGCAGCCCTGTCACCAACATTTGCCAAGCAGCCGACAAACAGCTTTTACCCCTGGTGGAGTGGGCCAAG
CGGATCCCACACTTCTCAGAGCTGCCCTGGACGACCAGGTTCATCCTGCTGCGGGCAGGCTGGAATGAGCTGCTC
ATCGCTCCTTCTCCCACCGCTCCATCGCGTGAAGGACGGGATCCTCCTGGCCACCGGGCTGCACGTCCACCGG
AACAGCGCCACAGCGCAGGGGTGGGCGCCATCTTGACAGGGTGCTGACGGAGCTTGTGTCCAAGATGCGGGAC
ATGCAGATGGACAAGACGGAGCTGGGCTGCCGCGCCATCGTCTCTTAACCCCTGACTCCAAGGGGCTCTCG
AACCCGGCCGAGGTGGAGGCGCTGAGGGAGAAGGTCTATGCGTCTTGAGGGCCTACTGCAAGCACAAGTACCCA
GAGCAGCCGGGAAGGTTGCTAAGCTCTTGCTCCGCTGCCGGCTCTGCGCTCCATCGGGCTCAAATGCCTGGAA
CATCTCTTCTTCTCAAGCTCATCGGGGACACACCCATTGACACCTTCTTATGGAGATGCTGGAGGCGCCGCAC
CAAATGACTTAGGCCTGCGGGCCCATCCTTTGTGCCACCCGTTCTGGCCACCCCTGCCTGGACGCCAGCTGTTCT
TCTCAGCCTGAGCCCTGTCCCTGCCCTTCTCTGCCTGGCCTGTTTGGACTTTGGGGCACAGCCTGTCACTGCTCT
GCCTAAGAGATGTGTTGTACCCCTCCTTATTTCTGTTACTACTTGTCTGTGGCCAGGGCAGTGGCTTTCCTGAG
GCAGCAGCCTTCGTGGCAAGAACTAGCGTGAGCCAGCCAGGCGCTCCCCACCGGGCTCTCAGGACACCCCTGCC
ACACCCACGGGGCTTGGGCGACTACAGGGTCTTCGGGCCCCAGCCCTGGAGCTGCAGGAGTTGGGAACGGGGCT
TTTGTTCGTTGCTGTTTATCGATGCTGGTTTTTCAGAAATCCTGTGTGGCCCTCCTGTCTGGAGTGACATCTTC
ATCTGCTCTGAATACTGGTGCCAGCCAGCCCGTGACAGCTTCCCCCTAATCAGGAGGGGACAGCTGGGGGCGCA
AGCTGGTGTGTATCAGCAAAGACCTCAGCCGCTCGGGGATGAGAGGGGACTCGTGGGGCAAGCAAGCTGCCCT
GTGCTCTGAGTGAGGGGAAGGTAGCCCCTTTTTCCAAAGATAACTCACAGTTTTGCCCTCGAGCCAATGAGAAC
ATGAGCTGCCCTCTGTGCAAGGTTTCGGGGCCACCTCCAGGCTGCAGGGGCGGGTCACTCACCCCCCTGTTTTCT
CTCTGCCCTTGGTGTCTGTTTTAGACTCCCGACTCCCGTTAGACCAGAGTGCCCCGGCCCCCTCCCCAGCCTG
AGTCTTCTCCTTGCTCTGCGGGGTGGGCTGAGGCTTGTCTTGTTCCTGCAGGGCTGGCCCTGGCTCGGGCAGG
GTGGGGCATCACCACTCACTGGCCTTGCTGGAGGCACAGGGCTCTGCGGACCTGCAGCCATCTGTGAGGCCCCG
GGGATGGGAGGGGAGGAGGGTGGCCTGTTGGTTTCCCTCAGAGGGGCGAGGTGGCCTGGAGAGAGAGGGGCTCA
GGAATGGGAGCCTCGTGGGTGGGGCAGATGCTCCGCGGCTGGAGTGGCTCTGCCGGGGCATTGGTGGGACCCC
TGCTCAGGCCTTCTCTCTGGCTGCCAGTTGTGTCTAAAAGACTCTTGGAATCTGAGAACCCGGAGTCGACGCGC
CTCGGGCCTGGGCCACACGACGGCCCTGGTGGGACCACCCAGCCTGGTATTGTCCACGGACAGCGTTGTTACCC
AGAGCCTTACTTGGGAGCCTCACTGAACGCCTGCTCTGGTTGAAGGTGGGGTGGGGGCGGGGCTTGGGGCCTCCC
TGGCTCAGCCCAGTGCGGCCTGGCGCTCCTCCCGCAGGCTCTGCCCCGGGCTCCGGTGGTGCGGGGGCCCTCTCA
GGTTGAACCTCGCCTCTTTTGCAGTGAAGGCCCTCCCTTTGGCCTGAGTACTTTTCCCGTTACGCCTCAGTCCC
GTGGACCCAGCCTTTGTGAGTGGCAGGTGCCTGAACAGAGGGTGGATGGGGGGGATACCGGAGGGGGTCTTGCTCT
TCCCAGCCGACGTCTAGGAATGATGCGGGGGGGTGGACGCCCTTCTCCATAGTCTTTCCCACTGGAGCAGGGG
TTCTCAGTGGTGAGGGGAGCTGCCTACAGGTTGGACGGGAGGAGTGGCTTGGAGAGGCAGCTTTCCAGCCTT
GGTGGGGAAGAAAGTGTCATTCTTTGCCTTCTGGAGCTCCAGCCAGAGCTGAGCTTAGGCACCCGAGTGGAG
CCTGCAGCTGAGTCTGTGCCCAGACAGGCTGTGAGAGATTCCAGAAGCCTCTCCTCCCCGCCGCCCTCCACCCC
TGCTTTACAGCTTGTGGATCCCTAGAGGTGGCCCCCTGCCGATCCACCGTCTGAGGCAGAGTGTGAGCCTC
ATACCTGTACAGGTCCCCGGCCAGCTGGGCCCCCTCCAGGCACTGCCAGGAAGCCCCAGCTGCCCCCTGGCGGGT
GTGGTGGAAATGGCAGGAGGGTGCAGGTACTCTTGGGGCCCCAGCGGTGGGAGTGCAAAAGACCCAACGCCAACA
CCTGGTGCCTTCTGCAGCCAGCGCCACCCATCCGTGCCCGGACCCTTGGAATGCCCCGCGGCTCCAGAGGAAAA
AGCCCAGGGACGGGGCTCCGTTGCGGGGGTGGCTGCTTCTTGGAACCTTGTGCTTTCGGCGCTGGCTGGC

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FIGURE 2832B

TGGCTGGCTGGCTGTAAAGCACTGAAGCCCCCGGCCGCCAACCCCTGAAAGCAGAACCTGGCCTCCCTGGCCAC
AGCAGCCTTACCCACCGCTCTACGTGTCCCGGGCACTTCCCGCAGCCTTCCCGTCCCTTTCTCATCGGCCTTGTA
GTTGTACAGTGCTGTTGGTTTGAAGAGGTGATGTGTGGGAGTGCGGCTCATCACTGAGTAGAGAGGTAGAATTT
CTATTTAAACCAGACCTGTAGTAGTATTACCAATCCAGTTCAATTAAGGTGATTTTTTGTAAATTATTATTTTG
GTGGGACAATCTTTAATTTTCTAAAGATAGCACTAACATCAGCTCATTAGCCACCTGTGCCTGTCCCCGCTTG
CCCGGCTGGATGAAGCGGCTTCCCGCAGGGCCCCCACTTCCAGTGCGCTTCCCTGGGGACCCAGGGCACCCC
GGCACCTTCAGGCACGCTCCTCAGCTGGTCACCTCCCGGCTTTGCCGTTTCAAGTGGGGCTCCTGAGGCTCAGGAG
TGAAGATGCCACAGAGCCGGGCTCCCTAGGCTGCGTCGGGCATGCTTGGAAGCTGGCCTGCCAGGACCTTCCAC
CCTGGGGCCTGTGTAGCCGCCGGCCCTCCGCACCTGGAAGCACACGGCCTCTGGGAAGGACAGCCCTGACCTT
CGGTTTTCCGAGCACGGTGTTTCCCAAGAATTCTGGGCTGGCGGCCTGGTGGCAGTGCTGGAGATGACCCCGAGC
CCCTCCCGTGGGGACCCAGGAGGGCCCTGCCGGAATGTGCAGCCTGTGGGTAGTCGGCTGGTGTCCCTGTCTGT
GGAGCTGGGGTGCCTGATCTGGTGTCTGTCACGCAGGTGTGTGGTGTAAACATGTATGTGCTGTACAGAGAGAC
GCGTGTGGAGAGAGCCGCACACCAGCGCCACCCAGGAAAGGCGGAGCGGTACCAGTGTTTTGTGTTTATTTTAA
ATCAAGACGTTTTCCCTGTTTTCTATAAAATTGCTTCTGTGTAAGCAAGTACATAAGGACCCCTCCTTTGGTGAAA
TCCGGGTTTCAATGAATATCTCAAGGCAGGAGATGCATCTATTTTAAGATGCTTTGGAGCAGACAGCTTTAGCCG
TTCCCAATCCTTAGCAATGCCTTAGCTGGGACGCATAGCTAATACTTTAGAGAGGATGACAGATCCATAAAGAGA
GTAAAGATAAGAGAAAATGTCTAAAGCATCTGGAAAGGTAAAAAATAATCTATTTTGTACAAATGTAATTT
TATCCCTCATGTATACTTGGATATGGCGGGGGAGGGCTGGGACTGTTTCGTTTCTGCTTCTAGAGATTGAGGTG
AAAGCTTCGTCCGAGAAACGCCAGGACAGACGATGGCAGAGGAGAGGGCTCCTGTGACGGCGGCGAGGCTTGGA
GGAAACCGCCGAATGGGGGTGTCTTCCCTCGGGGCAGGAGGGTGGGCCTGAGGCTTTCAAGGGTTTTCTTCCCT
TTCGAGTAATTTTTAAAGCCTTGCTCTGTGTGTCTGTGCGGCTCTGGCCTTCTGTGACTGACTGTGAAGT
GGCTTCTCCGTACGATTGTCTCTGAAACATCGTGGCCTCAGGTGCCAGGGTTTGATGGACAGTAGCATTAGAATT
GTGGAAGGAACACGCAAGGGAGAAGTGTGAGAGGAGAAACAAATATGAGCGTTTAAATACATCGCCATTC
AG

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FIGURE 2833

CTGATGGAATAACAAAGACAACAGGCTTTTGCGCCACGCGGCGATCTTCCAAAGGCCCGGATGTCGCTTACAGAG
TCACCAAAGACGCGCAGCTCAGCGCACCCACCATGCCTCCAGCCCCCAGCTCGCCCCGACCCATCCTGTTTCGTGA
ATAGGTCTCAGGGGTGGGGGAGGGACTGCCAGATTTGGACACTATATTTTTTTCTAAATTCAACTTGAAGATGT
GTATTTCCCTGACCTTCAAAAAATGTTCCAAGGTAAGCCTCGTAAAGGTCATCCACCATCACCAAAGCCTCCG
TTTTTAACAACCTCCAACACGATCCATTTAGAGGCCAAATGTCATTCTGCAGGTGCCTTCCCGATGGATTAAAGG
TGCTTATGTTTTGTGAGTTTAAAGTAAATATTTGTATTGTATTGTTATAAATGTTAAGTGTGCCTGGCTTTCAA
TCATGCACGGAAACCCAGTCTCAGTCCACGGACAGAATGGGCGAGGCATGGATTCTGGGTTGCAGTACCGTTCT
GATTAGAAATAGGAAGTCTCCCCACCCCGCCCTGGCCAAGAACGTGCAATAAATGGGAAGTTTGCCTCGGGGCA
GCAAGAATTTATGCTGCCATTGAAAAGCAGGTACAGTGCCCTTTTCAGACAGTTTTTGATTGCTCTAGACTT
TTTTTTTTTTAATAGGGAAAAAATTTGATAATTTCTTTTCTTACATGCACTTAAGACTAAAACACAGGTTTG
GATTAATTTTATTTGCTTCCTTTTCCGCTTTTCTTCCCGCAGAGCCTGATGGGAGAATGTCCAGGGCAGGGAAA
CCACATTTTGTAGGTGATACTCAATGAAAATTTGGTGCTTATTTTTTACACTTCTCTCTTGTGGCTCTCTTGT
GGTGCTATCTATCTGTTTTAAGGTCTCCTTGAAGGCGCACTGGGGACCCTGGCCATGCCTCGTTCTCCCTGCTTT
CTTTATCCTGTTATTGCCTCCACAGTCTGTTGCCAAGGACTCTAAGATCAATGCACGTCACTTTCTTTTCCACTG
GGCAGGATAGCCAAGCACACTCCCTCCTGCGCTCTCCCGCCCCGGTGCGTCCACTCCCGAGGGCTGTTATGAGGA
CTGGGTTGTGCCTACTTGATTTGAAAACACACACAAGCAATAAAAAGCCTCTTCTGCAATTGTCTGTGGTGTGAC
CATAGCAGATTATATTTGGTTCCTGAATGTTTGTGGTGCTAATTTCTGTGTTTGTTCGAAGCCGTTTCAGTCATGC
CATGCGCTGCTTCGGTAGATGGAGTAATGTACAATGAAGTCCATGAGTCTCTCCAGGGCTGCCTGCAGCACGTCT
TTTCCAAGTAGCCTATTTGGATTCCCATCTCAAATGTCTGGATGCGAGCGTCAGCGGCTCCAGAGCTCGGGGCG
GGTGAGGTCCCCCTTTGGGGAACCCCTTTCTGCCATCGAGGTGCGGGGGCTGCCGTCTGTGGGCAGGAGGACCCG
AGGGGCAGCCAGGAAAGGCGATCTTCTCACTGTGAAAAGTTGCCCGGGTGCGAGCGCTTTTCTTCTACCATGGG
AAATGCAGGCTGGGCCCTTTGGGGTGAGCCTGCGGGGCTCTGGTGCTGTCCCCGACCCCCACCACCAGGAATGC
AGTTCCAGCTTAGGAAGCCACAAACAAGCCACCCAGGAGGAACAAACACCGCCAGCGTGGATTTTCCAAATTTT
CCTGGAAGTAAGTCTCGCTCTTGCCAAAGAAAAGTCTGGCTTGGAGAGTCTCTGGAGCCCAGGATGCCAGCATG
TGCCAATGACTGTACCTTCATCTCTTCAAAAGAAAAGCCATAGCCGAGGACTGTCCCGCGACCCCGTGGACTG
CGTCTAGGTCAITGATTCTGTTTTCATTTCTCATCCCATCCAATTTGTCTTTTCTCCTGTCAATTTCTTCTC
TGTGGTCCCTTCAAAGTTGTTATAATTTGTACTGAACTTCAAATGTGTCCCGTTCTCCCCAGACCACTCTAGCC
ACAGTATATTGCAATAAAATTACTTCTTATATTTGCAGAAATTTCTTTGGTGTAATTTTATTTTTTCTCTCAAT
ATATATAATTGGACAAACGCTGGCAAAAAGAAAAAATGGTAAGCAAAAACCCAAGATAAAGTTTCGAGGACAT
CAGGCCTTTTGAATACAATGTCAAATGACACATTGTACGGTTTCAAAAATCCGCTAGACATGTCATAAGTTTT
AACTGTAATGCCCAGGAAAGGATATCTTAAAAATATTCTAAACTTGTGTAACAAAGGAATAATTAAGTGAATAGT
TTTTCAATAAATCGAGTTGGGTGTTTCCACCGT

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FIGURE 2834

CAGGGAGTTGAGAACTGTGGCACAAGGCGAGAGCTGGTTTCCTCTGCCCTGTTAGAGCTGGGGGACTCTTCAGA
GTCAAAGGCCAGAGAGC**ATG**GAGCTGAGTGGAGCCACCATGGCCCCGGGGGCTCGCTGTCTGTAGTCTTGTTCC
TGCATATCAAGAACCTGCCCTGCCAGGCTGCGGACACATGTCCAGAGGTGAAGGTGGTGGGCCTGGAGGGCTCTG
ACAAGCTCACCATTCTCCGAGGCTGCCCGGGGCTGCCCGGGGCCCCAGGGCCAAAGGGAGAGGCAGGTGTCATTG
GAGAGAGAGGAGAACGCGGTCTCCCTGGAGCCCCCTGGAAAGGCAGGACCAGTGGGGCCCCAAAGGAGACCGAGGAG
AGAAGGGGATGCGTGGAGAGAAAGGAGACGCTGGGCAGTCTCAGTCGTGTGCGACAGGGCCACGCAACTGCAAGG
ACCTGCTAGACCGGGGGTATTTCTGAGCGGCTGGCACACCATCTACCTGCCCGACTGCCGGCCCCCTGACTGTGC
TCTGTGACATGGACACGGACGGAGGGGGCTGGACCGTTTTCCAGCGGAGGATGGATGGCTCTGTGGACTTCTATC
GGGACTGGGCCGCATACAAGCAGGGCTTCGGCAGTCAGCTGGGGGAGTTCTGGCTGGGGAACGACAACATCCACG
CCCTGACTGCCAGGGAAGCAGCGAGCTCCGTGTAGACCTGGTGGACTTTGAGGGCAACCACAGTTTGCTAAGT
ACAAATCATTCAAGGTGGCTGACGAGGCAGAGAAGTACAAGCTGGTACTGGGAGCCTTTGTGCGGGGCAGTGCGG
GTAATTCTCTAACGGGCCACAACAACAACCTTCTTCTCCACCAAAGACCAAGACAATGATGTGAGTTCTTGAATT
GTGCTGAGAAGTTCCAGGGAGCCTGGTGGTACGCCGACTGTCATGCTTCAAACCTCAATGGTCTCTACCTCATGG
GACCCCATGAGAGCTATGCCAATGGTATCAACTGGAGTGCGGCGAAGGGGTACAAATATAGCTACAAGGTGTCAG
AGATGAAGGTGCGGCCCGCC**TAG**ACGGGCCAGGACCCCTCCACATGCACCTGCTAGTGGGGAGGCCACACCCACA
AGCGCTGCGTCGTGGAAGTCACCCATTTCGCCAGCCAGACACACTCCCATGACGCCCACAGCTGCCCTTTGCC
CCCAGCTCAGTCAAGCCGCCACATGCCACAACTCACCAGAGGGAGAATTATGTTTCTAAATATGTTTACTTTG
GGACAGAAAAAAAAAA

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FIGURE 2835

MELSGATMARGLAVLLVLFLHIKNLPAQAADTCPEVKVVGLEGSDKLTILRGCPGLPGAPGPKGEAGVIGERGER
GLPGAPGKAGPVGPKGDRGEKGMERGEKGDAGQSQSCATGPRNCKDLLDRGYFLSGWHTIYLPDCRPLTVLCDMDT
DGGGWTVFQRRMDGSVDFYRDWAAYKQGFGSQLGEFWLGNDNIHALTAQGSSELRVDLVDFEGNHQFAKYKSKV
ADEAEKYKLVLGAFVGGSSAGNSLTGHNNNFFSTKDQDNDVSSSNCAEKFGAWWYADCHASNGLNGLYLMGPHE
ANGINWSAAKGYKYSYKVSEMVRPA

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FIGURE 2836

GC GCGGGGGAGCCATTAGGAGGCGAGGAGAGAGGAGGGCGCAGCTCCCGCCAGCCCAGCCCTGCCAGCCCTGC
CCGGAGGCAGACGCGCCGGAACCGGGACGCGATAAAATATGCAGAGCGGAGGCTTCGCGCAGCAGAGCCCGCGCGC
CGCCCGCTCCGGGTGCTGAATCCAGGCGTG GGGACACGAGCCAGGCGCCGCGCCGGAGCCAGCGGAGCCGGGGC
CAGAGCCGGAGCGCGTCCGCGTCCACGCAGCCGCGCGCCGCGCCAGCACCCAGGGCCCTGC ATGCCAGGTCGTTGG
AGGTGGCAGCGAGACATGCACCCGGCCCGGAAGCTCCTCAGCCTCCTCTTCCTCATCCTGATGGGCACTGAACTC
ACTCAAAATAAAAGAGAAAACAAAGCAGAGAAGATGGGAGGGCCAGAGAGCGAGAGGAAGACCACAGGAGAGAAG
ACACTGAACGAGCTTCCCTTGTTTTGCCTGGAAGCCCACGCTGGCTCCCTGGCTCTGCCAGGATGTGCAGTCCA
AATCCCAATCCAGCAGTGGGGTTATGTCGTCCCGCTTACCCTCAGAGCCCTTCTCCTGGTGCTGCCAGACGATC
AGCCAGTCCCTCCTGGAGAGGTTCTGCATGGCCTCTAGGAGAGAAGTTTTCTTGGCCCCAGGAAGGCCTGGTGGA
GGGTGGTGGTTGTGCACTGTTGCTGGACAGATGCATTCAATCATGTGCACACACACACACACATGCACACACA
GGGGAGCAGATACCTGCAGAGAAGAGCCAACCAGGTCTGAT TAGTGGCAAGCTGCCCCACAAAGGGCTATGCCT
GTGTCTTATTGAGACACCTTGGCAAAGAGATGGCTGATTCTGGGTGGTCTGGACATGGCCGCACCCAAGGGCCC
TCCAAGCCTTAATGGCACCTGAAGCCTCCATGCCAGGCCAAAAGATGCTTTTCCTCCCTAAAAAAAAAAAAA
AAAAA

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FIGURE 2837

MPGRWRWQRMHPARKLLSLLFLILMGTELTQNKRENKAEKMGGPESERKTTGEKTLNELPLFCLEAHAGSLALP
RMCSPNPNPAVGLCRPAYPQSPSPGAAQTISQSLLERFCMASRREVFLAPGRPGGGWWLCTVAGQMHSFMCTHTH
THAHTGEQIPAEKSQPGPD

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FIGURE 2838

TGGTTACTGAGATGGTGAAAACCAGGGGAGACCTGGGGGACATCACAAGCTTGGTTCCTACCAGGTTTATGGAGC
CGTACATCTTTGGGAGCCGCCTGGACCACGACATCATCGACCTGGAACAGACAGCCACGCACCTCCAGCTGGCCT
TGAAC TTCACCGCCACATGGCCTACCGCAAGGGCATCATCTTGTTTATAAGCCGCAACCGGCAGTTCTCGTACC
TGATTGAGAACATGGCCCGTGACTGTGGCGAGTACGCCCACACTCGCTACTTCAGGGGCGGCATGCTGACCAACG
CGCGCCTCCTCTTTGGCCCCACGGTCCGCCTGCCGGACCTCATCATCTTCCTGCACACGCTCAACAACATCTTTG
AGCCACACGTGGCCGTGAGAGACGCAGCCAAGATGAACATCCCCACAGTGGGCATCGTGGACACCAACTGCAACC
CCTGCCTCATCACCTACCCTGTACCCGGCAATGACGACTCTCCGCTGGCTGTGCACCTCTACTGCAGGCTCTTCC
AGACGGCCATCACCCGGGCCAAGGAGAAGCGGCAGCAGGTTGAGGCTCTCTATCGCCTGCAGGGCCAGAAGGAGC
CCGGGGACCAGGGGCCAGCCACCTCCTGGGGCTGACATGAGCCATTCCCTGTGATGTTCACTCTCCTCCCAA
GCAAACCACAGCCAGCTGGGTTGGTGGGACAGCCAGGCCAGATGACCTGATTCCAGCAAAAATAAACTCAGATT
TGGGCAAAATG

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FIGURE 2839

CTGGTCCAGGCACAGCCTTGCCACAGTCCAGAGAAGGCCACCTCTAATGGGGCCTGCAGGCATTGTGGCCACAGG
AGGAAAGGGCCGGGGGGCCCCCTCTCCCCACTCCTGGGGCAGCTCCCTTGCCCTTCCCCAGCCTCAGGCACTCTCA
TCATCTCCGTTGGCCTCTTCTGGGGGCTCTTGGGGTTCATCTCCAGGGTGGAAAACCTGGAGGGCCCCCTCCTGGC
AGAGTCAAGGATGGGGTCAGCGAGACCCCATCCCCCTCAGCCCTCAACCTTTGTTTCACCCAGAGCCCCCTCTGAAT
CCTGGGAGCTGGCTCTTTCCACTCCCCGAGGGGGCCCTCAGGCCACCCCTGGCTGTCCCAGCATGCCCCCGCGG
CTTCTGCGCTGCACCCCTTCCCGTCCCTCCCTGCTCCTCATGGTCACTAGTGCTGCTTATCCACTGGGTCATCCC
CTCGGCCAGGGCCCCCTCTGCCCCTGGAAGCCCAGCAAGCGCCCACTCGTAGCTCCTCAGCGGGTCCTCGCCGGCC
TGTGCCAGGTGCAGGGGCCAGTGGGAGGACAACAGGAGCCACGCAGGCCATCAGCGCAAGAGCAAACGCACATGG
CAACGTTGGTCCGCTCAGCCACTGGTTCTGTGGTGAACGGTGGATGTCTGCACTGTGACATCAGCTGAGTACGA
GAACTGCCGGTTGCGGCTTATAACAAGATGATGCCCTTGCGGTAGGCCATGTGGGCGGTGAAGTTCAAGGCCAG
CTGGAGGTGCGTGGCTGTCTGTTCCAGGTCGATGATGTCGTG

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FIGURE 2840

MAPAASALHPSRPSLLLMVTSACLSTGSSPRPGPLLPWKPSKRPLVAPQRVLAGLCQVQGPVGGQQEPRRPSAQE
QTHMATLVRSATGSVVERWMSAL

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FIGURE 2841

GGGAAGCGACGAGTCCGGGACGCCCAGCGCGGGCCCGGAGCAGGGGGAAGGGAAGTGCGGCTCGGTTCGGCGCGGG
TGGAGGGGGCGTGAGGCCGCCCTACGGTGGCCGTCGAGGGACGGCGCTACGGCTCCCACGCTAGGCCAAACGCCT
CCGGCGGGCGCGCCCGAGAGCCCCCTTACCTGCAGGGCGACCCAGCCGGCGACGCGTGAACACGCCCTCAGCC
GCCTTGCCAGCGCCCCAGCCGCGCGCCCCAGCACCATGCGGCCGCCCTGCGCACGGAGCCCCAGGGACAGGGG
CACCCGACAGGCCCGGCCCTAGCACCGCCGCGGCCCGGAGGTCCGGGACGCCGGCGCGCGCGGAGAGGGCA
CCGGGCGGACGCCTCCCCCAGGGTCACTGCGGGCTCCAGGCCCTAGGCGCCCATGACCCCTACGCCAACAGCC
GCCTGGACACCGCCGCCGCCACTGCGACCTAGCGCCGCCCGCCGGGGCCCAATGCCGGTCATGCCATTCCGC
GGCGGGTGCGCTCCTTCCACGGCCCCGACACCACCTGCCTGCATGCGGCCCTGCGGGCCCGTGCGCGCCTCCACC
TGGCCCGCACCAAGTACAACAACCTTCGACGTGTACATCAAGACGCGCTGGCTGTACGGCTTCATCCGCTTCCTAC
TCTACTTTAGCTGCAGCCTGTTCACTGCGGCGCTCTGGGGTGCGCTGGCCGCCCTCTTCTGCTACAGTACCTGG
GCGTTCGCGTCTGCTGCGCTTCCAGCGCAAGCTGTGCGGTGCTGCTGCTGCTGCTGGGCCGCCGGCGCGTGGACT
TCCGCTGGTGAACGAGCTGCTCGTCTATGGCATCCACGTACCATGCTGCTGGTTCGGGGGCTGGGCTGGTGCT
TCATGGTCTTCGTGGACATGTGAGGGCCGTGGGTGCGAGCTTGATGTATCGTCCCGGCCCTGTGGCTGTGTTCTCT
CCATGGGTGGGGTGGGCCAGCGCCTTCCCTTCGCCCATCCCCAGGCAGTGCCTGCTGCCCGGCCGCCACGGAGA
GAAAAGAAAGGGCTGAGACTTCTGTGATGGGGGCGCGGACACCACCCCTAGGCTGGCTTCCTGGACCCACCCTCC
CCGTATGCACTCTCAGGGGACGCGCCACCTGCCGGTGGCTCCTGCTCACATGTCTTCGGGTGCTACTGCGGGGT
GGGCCCTCCGTTCGCCCTCTCTGTGGGCCCTCTTCCAGGACCACAGCTGCCAGGGACTTTAGACATCACCCCTGGG
AGGCCCTGGACACAGAGGGCTGTGTGCCAGGAGCAATTCCGAGGGGGGGCCCTCCTGGCTGCACAGCCCCCTTC
TGCGTGCCCTGGCCCCAGCCCCAGCCAACGGGACACGGAAGGCTCCCTCGCTGACACACCACACTGCCACAAAG
CTGCTTACTCTGCCCTGGGCCGCTGAGGCCTGGCACTGCCCGCGGACCACCCTGTGTGTGTCATCCTGAGGGGC
TGTGTGGGTCTGAGTCCCCAGCCAGCCTTCAGGGTCCCCTTGATTGTGTAGATGCAGTCTAGCGGGGGGGCCGG
AGAAGGGCTCAGGTGGGAGGGGCTCAGCAGGCTCCAGCTCAGGGGCTGGCCTGGGGGGAACCTGGGAGCCAG
GGGCTGACTCCAGCAACACTGGCCTGTCTGCCTGTTCTGGGAGGGCTGTGAGGATGTCTTGCAGATGCTCTGGAT
TTCTGCGGAGGCACCTCCATTCTTTCTGGCTTTTTTTCGGGGGAGGGCTTTGGGCCTCTTTCTTTGAGGGAAC
ACCGTCAAAGAAAGCCTGGGAGATCGAGGCTTCAGTGAGCCAGGATGGAAACGCGTGTCCCAAGTGTCCGGAGCA
GGCGGCAGAGGCCTCAGTGCGGCAACACAGCCCCAGAGCCTGTGTGGCACCAGCAGCATCTTAGAGCCCCAGGT
ATATGCTGAGATCTTATCTACGCTGTCTCCAGTGTCTGGGGGGCCCAATGATGGCACAGGGGCGAGGTGGGCT
GGAGGGGCGCAGATGCCTGTGTTACAGGGAGGGTGGCCACCATGGGCCGAGGTCTCACCCAGGACCCCTTGCTCTG
CTCCTCAGCCTTGCACTACGGCAGCACTATGGTGGACTGCCCATGGCCGTGTGACTTTGGGGGCAAGTGGGAGG
GCGCCCTGAATAATGATTGCAAGGACAACAGGCAGAGGCTACCCTAGAGCAGGACACAGGGTGTGGTACTGACAA
CCCTAGTGTACCTCAAATCCATGTCCCCACACTCTGGGCATGGGTGGGACTTGTGACCCTACCCTGTGAGGCGG
ACCAGTGGCCCAGGAGCCATGAGGACAGTTGTGTGCCACTGGAAGAGAACTTTTTGAAAAACCTAAATCAGGT
AGAGAAAGCAAAAAATCTCTGGCCGTAAACCGTGCTCTTAATTTATCGGCAGCTTCTGTGGATGACCTCTGATG
AGCCCCGGGCTGCGTCCACGCCCTGGGCAGGTAGGCGGGAGCTTCCCTGCGTGGGCCTCATTTCTTGCTGCAGAGA
ATCTTTTGACTAAGTCATGCTGTTTCTCAAAGAAGCTTTGTTTTTTGTTAACGTATTACTCAGAGTCACCCAA
GCCTCTTGCTGAGGGTGAAGGTGGGACGGGAGGCGGGAGGGGGCTGGTGGTGCCGCTCGTGCGGTGTCAACGCT
GCAGGGAGTTGTGGCACCTTGGTGCCCTCTGAGCACCTGGCCGCGCTGCTGTCCCGGTGCCTGTGAAATTGCTCA
TGCCATGACCCACCTGCATTAAACCTATTTTTTTAATGTG

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FIGURE 2842

MLWISAEAPPFLSGFFCGGGLWASFFEGTPSKKAWIEIASVSQDGNACPKCPEQAAEASVRQTQPQSLCGTSSIL
EPQVYAEILSHAVLQCLGGPNDGTGAGGLEGRRCCLCSGRVATMGRGLTQDPLLCSALQSRQHYGGLPMAV

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FIGURE 2843

CTGGGCTGGTGCTTCATGGTCTTCGTGGACATGTGAGGGCCGTGGGTGCGAGCTTGATGTATCGTCCCGGCCTGT
GGCTGTGTTCTCTCCATGGGGTGGGGTCGGCCAGCGCCTTCCCTTCGCCCATCCCCCAGGCAGTCGCTGCTGCCCCG
GCGCCACGGAGAGAAAAGAAAGGGCTGAGACTTCTGTGATGGGGGCGCGGACACCACCCCTAGGCTGGCTTCCT
GGACCCACCCCTCCCCGTATGCACTCTCAGGGGCGAGCGCCACCTGCCGGTGGCTCCTGCTCACATGTCTTCGGGT
CGTACTGCGGGGTGGGCCCTCCGTTCCGCCTCTCTGTGGGCCCTCTCTCCAGGACCACAGCTGCCAGGGACTTTAG

ACATCACCCCTGGGAGGCCCCCTGGACACAGAGGGCTGTGTGCCCAGGAGCAATTCCGGAGGGGGGCCCTCCTGGCT
GCACAGCCCCCTTCTGCGTGCCCTGGCCCCAGCCCCAGGTATATGCTGAGATCTTATCTCACGCTGTCCTCCAGTG
TCTGGGGGGCCCAAATGATGGCACAGGGGCGAGGTGGGCTGGAGGGGCGCAGATGCCTGTGTTTCAGGGAGGGTGGC
CACCATGGGCCGAGGTCTCAGCCAGGACCCCTTGCTCTGCTCCTCAGCCTTGACGTCACGGCAGCACTATGGTGG
ACTGCCCATGGCCGTGTGACTTTGGGGGCAAGTGGGAGG

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FIGURE 2844

MGGVGQRLPFAHPPGSRCCPAPTERKERAETSVMGARTPPLGWLPGPTLPVCTLRGS AHLPVAPAHMSSGRTAGW
ALRSASLWASLQDHSCQGL

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FIGURE 2845

CTCGTGGACACCTGCCACCGGGCCATGAGGACCACCTTCCTCCACATCTCCAAGACCCCCCAGGAGAACGGGGCC
ACTGCGGGGTCTGGCGTGCAGCCGGCCCAGTAGCCCAGACCACGGCAGGGCATGACCTGGGGAGGGCAGGTGGAA
GCCGATGGCTGGAGGATGGGCAGAGGGGACTCGCGCCCACGGCACCTCTGGGAGCTGGGATGATAAAGATGAGGC
TTGCGGCTGTGGCCCGCTGGTGGGCTGAGCCACAAGGCCCCCGATGGCCCAGGAGCAGATGGGAGGACCCGAGG
CCAGACGCACACTGTCCGAGCCCTCTGCTCAGCCGCCTGGGACCCACCAGGGTGCAGCTGGGCTCCAGGGTCCAG
CCCACAAGCTGCATCAGGCTCTCTGGGAGAGGAGGGGCCTGGAGGGCCAGGAGTCCCAGACTCACGCACCCTGGG
CCACAGGGAGCCGGAATCGGGGCTGCTGCTCCTGCTGGCCTGGAAGACTCTGTGGGGTCAGCACTGTACTCCG
TTGCTGTTTTTTTATAAACACACTCTTGGAAGTGGCTGGGGAGCTGTGGTCACTCACAGGGCGGGCAGGTGACCA
GGGCGGTGGAGGCGACGCTGTGTCTTCCCAGCTGCCCTGCCTAGAGGCCCAGGGTGCAGGCACCGCCACCCACCC
GTGTTCCCTATCCAGGAGTGGACCCACATCACCT

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FIGURE 2846

CGCGGGGGAGAAGCGGGAGCGGGAGCGGGAGCGAGCTGGCGGCGCCGTCGGGCGCCGGGCGGGCCATGGAGCTG
TGGCCGTGTCTGGCCGCGGCGCTGCTGTTGCTGCTGCTGCTGGTGCAGCTGAGCCGCGCGGCGGAGTTCTACGCC
AAGGTGCGCCCTGTACTGCGCGCTGTGCTTCACGGTGTCCGCCGTGGCCTCGCTCGTCTGCTGCTGCGCCACGGC
GGCCGGACGGTGGAGAACATGAGCATCATCGGCTGGTTCGTGCGAAGCTTCAAGTACTTTTACGGGCTCCGCTTC
GAGGTGCGGGACCCGCGCAGGCTGCAGGAGGCCCGTCCCTGTGTTCATCGTCTCCAACCACAGAGCATCCTGGAC
ATGATGGGCCTCATGGAGGTCTTCCGGAGCGCTGCGTGCAGATCGCCAAGCGGGAGCTGCTCTTCTGGGGCCC
GTGGGCTCATCATGTACCTCGGGGGCGTCTTCTTCATCAACCGGCAGCGCTCTAGCACTGCCATGACAGTGATG
GCCGACCTGGGCGAGCGCATGGTCAGGGAGAACCTCAAAGTGTGGATCTATCCCGAGGGTACTCGCAACGACAAT
GGGGACCTGCTGCTTTTTAAGAAGGGCGCCTTCTACCTGGCAGTCCAGGCACAGGTGCCCATCGTCCCCGTGGTG
TACTCTTCTTCTCTCTCTTCTACAACACCAAGAAGAAGTTCTTCACTTCAGGAACAGTACAGTGCAGGTGCTG
GAAGCCATCCCCACAGCGGCCCTCACTGCGGCGGACGTCCCTGCGCTCGTGGACACCTGCCACCGGGCCATGAGG
ACCACCTTCTCCACATCTCCAAGACCCCCAGGAGAACGGGGCCACTGCGGGTCTGGCGTGCAGCCGGCCCCAG
TAGCCCAGACCACGGCAGGGCATGACCTGGGGAGGGCAGGTGGAAGCCGATGGCTGGAGGATGGGCAGAGGGGAC
TCCTCCCGGCTTCAAATACCACTCTGTCCGGCTCCCCAGCTCTCACTCAGCCCGGGAAGCAGGAAGCCCCCTC
TGTCAGTGGCCTCAGACACAGGCCCTGGTGTCCCTGCAGGGGGCTCAGCTGGACCCTCCCCGGGCTCGAGGGC
AGGGACTCGCGCCACGGCACCTCTGGGAGCTGGGATGATAAAGATGAGGCTTGCGGCTGTGGCCCGCTGGTGGG
CTGAGCCACAAGCCCCCGATGGCCAGGAGCAGATGGGAGGACCCGAGGCCAGACGCACACTGTCCGAGCCCT
CTGCTCAGCCGCCTGGGACCCACCAGGTGCAGCTGGGCTCCAGGGTCCAGCCACAAGCTGCATCAGGCTCTCT
GGGAGAGGAGGGGCTGGAGGGCCAGGAGTCCAGACTCACGCACCTGGGCCACAGGGAGCCGGGAATCGGGGC
CTGCTGCTCCTGCTGGCCTGGAAGACTCTGTGGGGTCAGCACTGTACTCCGTTGCTGTTTTTTATAAACACACT
CTTGGAAGTGG

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FIGURE 2847A

GGGGAGAACACTTCTTTGTCTGGGATTCCAACCAGCTCTGTCTTAGCTTGTCTCTGCCTAGCAGTGTTGCCCAA
AGTAATTTTCCACAAGGTTCTGGTGCTTCCGAAATGGTTTCTAATCAGCCTGCTAATTTGCTGGTTCAACCACCA
TCCCAGCCAGTTCCAGAGAACTTGGTTCCAGAAAGTCAAAAAGGATCGTAAGGCAGGAAGTGCTCTTCCCGGATTT
GCTAATAGCCCTGCTGGAAGCACAGTGTGGTGTTAGTTCCACCTGCACACGGCACCCCTGGTGCTGATGGTAAT
AAGGCAAACCATTCAGTCATCAGGAAGACACTTACGGAGCCCTAGACTTTACCTTAAGCAGGACTTTGGAAAAT
CCTGTAAACGTGTACAACCCGTCCCATTTCTGACAGCCTCGCTTCTCAGCAAAGTGTTGCCAGTCATCCCAGACAA
TCTGGGCTTGGGGCGCCTAACCTTGACCGTTTTTATCAGCAGGTACAGAAAGATGCCAGGGCCAGCCTGGCCTC
GAAAGAGCCCAGCAGGAGCTGGTGCCACCCAGCAACAGGCTTCTCCCCACAACCTACCCAAAGCCATGTTTTTCG
GAGCTGTCAAATCCAGAAAGTCTGCCCCGACAGGGACAGGCCCAGAACTCAGCACAGTCACCAGCAAGTCTGGTT
CTGGTTCGACGCGGGTTCAGCAGCTGCCCCCTCGGCTCCTCAGTCTCTAGCGTGTCTCTGGTGTCCAGTGGCTCC
GGCCAGGCAGCTGTGCCGTTCAGAGCAGCCGTGGCCACAGCCAGTGCCTGCACCTGCCCCCGGCCACCCGCTCAG
GACCTGGCCGCTACTACTACTACCGGCTTTGTACGATGCCTACCAGCCTCAGTACTCTTTGCCGTACCCACCG
GAGCCTGGCGCAGCCTCCCTCTATTACCAGGATGTCTACAGCCTCTATGAGCCTCGATACAGGCCCTATGATGGT
GCTGCGTCTGCTTACGCCCAGAACTACCGCTATCCCGAGCCGAGCGGCCAGCTCCCGAGCCAGCCACTCCTCG
GAACGGCCACCTCCAGGCAAGGATATCCTGAAGGATACTATAGTTCCAAAAGTGATGGAGCAGTCAGAGCGAT
TACTATGCAAGCTATTACTCCAGCCAGTACGATTATGGAGATCCAGGTCACTGGGATCGTTACCACTACAGTGCT
AGAGTCAGGGACCCCGCACCTATGACCGGAGGTATTGGTGTGATGCAGAGTATGACGCATACAGGAGAGAGCAC
TCTGCCTTCGGGGACAGGCCCGAGAAACGTGACAACAACTGGAGGTACGATCCTCGCTTCACGGGGAGTTTTGAC
GATGACCCCGATCCGCACAGAGACCCCTTATGGGGAAGAGGTGGACCGGCGCAGCGTCCACAGCGAGCACTCGGCA
CGGAGCCTGCACAGCGCACACAGCCTGGCCAGCCGCCGACAGCCTCAGCTCCCACTCGCACCCAGAGTCAGATT
TACAGAAGCCACAATGTGGCTGCCGGTTCTACGAGGCCCGCTTCTCCAGGCTCCTTTCACGGCGATTTTGCC
TACGGCACCTACCGCAGCAATTTACGAGTGGCCCCGGCTTCCAGAGTATGGCTACCCTGCCGACACCGTCTGG
CCTGCCATGGAGCAAGTTTCATCAAGACCAACTTCTCCTGAAAAATTTTCAGTGCCTCATGTCTGTGCCAGGTTT
GGCCCTGGCGGTTCAGCTTATCAAAGTGATTCCCAATCTGCCTTCAGAAGGACAGCCGGCCTTGGTGGAGGTCCAC
AGCATGGAGGCCTTGCTGCAGCACACGTCTGAGCAGGAGGAGATGCGGGCGTTCCCGGGACCCCTGGCCAAAGAC
GACACCCATAAGGTGGATGTCATTAATTTTGCACAGAACAAAGCTATGAAATGTTTGAGAATGAAAACCTTAATT
GACAAAGAGTCTGCAAGTCTTCTTTGGAATTTTATTGTTCTTATGACAGACAAAATGGGACCGTGGTAGGGACC
GACATTGCGGAGCTTCTGTTACGAGACCACAGAACAGTGTGGCTTCTTGGGAAGTCGCCCAATGAAGCAAACCTG
ATTGATTTTCAGAAATGAGGCAGTGGAGCAGGTGGAAGAGGAGGAGTCTGGTGGAGGCCAGCTCTCTTTCTCACT
GGTGGTCCGGCGGCTGCCGCCAGCTCGCTCGAGAGAGAGACCGAGAGGTTTCAGGGAGCTGTTGCTGTATGGCGT
AAGAAGGATGCTTTGGAGTCTGCAATGAAGAATGGCCTGTGGGTCACGCTCTGCTACTTGAAGTAAGATGGAC
AGCCGGACACACGCCCGAGTCATGACCAGGTTTGCTAACAGCCTCCCAATCAACGACCCCTCTGCAGACAGTCTAC
CAGCTCATGTCCGACGGATGCCTGCCGCTCCACGTGCTGTGGAGACGAGAAATGGGGAGATTGGAGGCCGCAC
CTCGCCATGGTCTTGTCCAACCTGAACAACAACATGGACGTCGAGTCCAGGACGATGGCTACCATGGGCGACACT
CTGGCTTCAAGGGGCTCTTGGATGCGGCCACTTCTGCTACCTCATGGCCAGGCGGGATTTGGTGTTTACACG
AAGAAAACCTACAAAGCTTGTCTTAATCGGATCCAATCACAGTTTGCCATTCTTAAAGTTCGCAACCAACGAAGCA
ATCCAGAGGACGGAAGCCTATGAGTACGCCCAGTCCCTGGGTGCCGAGACCTGCCCCCTGCCTAGTTTCCAGGTG
TTTAAGTTCTACTCTCTGCGCCTGGCGGAAATGGGGCTGGCCACGCAAGCCTTCCACTACTGTGAGGCCATC
GCGAAGAGCATCCTGACGCAGCCGCACCTGTATCCCGGTGTTGATCAGCCAGCTTGTGCAGATGGCTTCCCAG
TTACGACTCTTCGATCCCCAGCTGAAAGAGAAGCCAGAAGAGGAGTCCCTGGCCGCAACCCAGTGGCTGGTTTAC
CTGCAGCAGGTGGAGCGGCAGATTAAGGAGGGGGCTGGAGTATGGCATCAGGATGGAGCCCTCCCGCAGCAGTGT
CCTGGCACTCCGAGTTCCGAGATGGAGCAGTTGGACAGGCCAGGACTCAGTCAGCCAGGAGCCCTGGGGATCGCC
AACCTCTGCTGGCGGTGCCTGCACCGAGCCCTGAGCACTCGAGCCCGAGCGTGGCGCTGCTGCCCTCAGCTCCG
CAGACGCTCCCTGACGGCCCATTTGGCCAGTCTGCCAGAGTGGCGATGTTCCAGTGCCACTGCCCCGGGGCCC
CTGGAGCCGGGTCTGGCTGTGTGACCCAGGGCTGCACTTGGCTTCTGAGCCCTCCGGGCTGGCCTCCCA
CCTGGTGTGCCACCTCTGCAGGAAGGAGACACTTGTCTCAGGAAGCCAGGAGCCAGACCCAGGGATAGTGCCG
CAGGAGGCGCCTGTTGGAAACTCACTTTCCGAGCTAAGCGAAGAAAAATTTGATGGAAAAATTTGCTAATCTGACC
CCCTCGAGGACGGTGCCAGACTCGGAGGCCCCCCAGGGTGGGATCGTGCCGACTCGGGTCCCACGCAGCCACCT

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FIGURE 2847B

CTGTCTCTCTCACCCGCTCCCGAAACAAAGAGACCCGGACAGGCAGCCAAAGAAAGAAACGAAGGAACCTAAGAAG
GGTGAATCCTGGTTCTTTTCGTTGGCTACCTGGAAAGAAAAAGACAGAAGCTTATTTGCCAGATGACAAGAACAAA
TCGATTGTTTGGGATGAAAAGAAAAACCAGTGGGTGAATTTAAATGAGCCAGAAGAGGAGAAGAAAGCCCCGCCC
CCACCTCCAACCTCGATGCCCAAGACTGTGCAAGCTGCCCGCCTGCCCTCCCAGGGCCTCCTGGAGCCCCCGTG
AACATGTACTCTAGAAGAGCAGCAGGAACCAGAGCTCGCTACGTTGACGTCCTGAACCCAAGCGGGACCCAGCGG
AGCGAGCCGGCTCTCGCTCCTGCGGACTTTGTGCTCCACTCGCGCCACTCCCAATTCTTCTAACTTGTTCTGTG
CCAACCCCACTGAGACCCAGGGACGTTGCGGACGGAATGATGGCCTCCTCGCTCTCTCATCCCCAGATGCAGAA
GAACCACAGCTTCCAGACGGGACTGGCAGGGAAGGGCCTGCAGCAGCTAGGGGCTGGCCAATCCAGAGCCTGCC
CCAGAGCCCAAGGTTTTAAGCTCTGCAGCGTCACTCCCTGGCTCTGAACTCCCCTCCTCCAGGCCTGAGGGTTCC
CAGGGAGGAGAGCTTTGCGCTGTAGTTCAATGAGTTCATTATCACGTGAAGTGAGCCAGCATTTTAATCAGGCT
CCTGGCGACCTCCCTGCTGCAGGGGGCCCTCCAGCGGGGCCATGCCCTTCTACAACCTGCTCAGCTGGCACAG
GCCTGCGCCACCTCCGGGAGCTCAAGGCTAGGGAGGATTGGCCAGAGGAAGCACCTGGTGCTGAACTAGGCTTGC
CCTGCTGTGAACCTTGCACTTGGAGCCCTGACGCTGCTGTTCTCCCCGAAGAACCCGACCGACCTCCGCGATCTCC
GTCCCGCCCCCAGGGAGACACAGCAGTGACTCAGAGCTGGTGCACACTGTGCCTCCCTCCTACCGCCCATCGT
AATGAATTATTTGAAAATTAATTCACCATCCTTTAGATTCTGGATGGAAAGACTGAATCTTTGACTCAGAAT
TGTTTGCCGAAAAGAATGATGTGACTTTCTTAGTCATTTAGGATGATTTAAGGATATAGTATTCTGGTCATTTA
AGAATGTTTCAATTCATTGAAGCCGGAGCTGTCTCTGCCACAGGAGACCATGGTCGGTAGTAACCAGGGCCTCT
CCAAGCCCAGCTGTGAGTCACTGCCAGTGAGTCCCGCGCTTCCTTTAAGGTGCTGGGAGCAAAGAGAGGGTGAC
TGAGGCAGACCCCAACCCCTGCTCTGCACCATCTGGGCCCTCGCCGTGTTTGAACCTGGCTGAATGAGTGGAGGG
CGCTGTGTTCTCAATCAGCGCTCCGAGGAGCCGTGGGGTTCTTCGGCATTAGTTACGGTTTTTGAGAGAGGC
CTTAGTTACTGCAGTGAATTTCTTTCTGTTGCAAAGACGCTTCCAGCCTCACTTTACTTTCTGTGGCCTGATGA
GGACCATGGGTGATTTTGTGTACCCAAAGCGCTGGGGACTGCCACCGTGTGGCCAGTCACTGGGAAGGAGCCC
CAGAGAGCCGGCTGTCTGACATGATGGCTCAGGGTGGTCATCCAGGTTGAAAACCTGACCGTGTGATGTTTGATTT
GGGCTTCATTTCTGTGTAGGAGCACGGTTAGACTCACTGTTAAGGAAGCTGGATGCACTTCTCTAAAGGCTGC
ACTTTCCGTGAGCACTTTTCTGTGTACAATCCACATGACCCACTTCTCCCCTGGGGGACGTTGGTTCAGAGGTT
GGTAGCACTTGGGGAGAGTATCTTAACACAGTTTCTTGACAGCAGCTCTGGAACCTAGTATTTCTGCCCCGAGTT
TTGCCACACTGAGACTTTGAGTAGCTCCTGGTGGACTCAACCTGTTCAACTCAGAGACGGGCCTCCTCTCACTG
ATGCAAAGCTTTAAGGCTTCTCTGACTGTTCTGAACTCTTCGTATTCTTGTCAAGTCTAAAGAGACTGAAGAAA
AGATTTAAATACTAATAAAAAATCAGTAGATAATTTCTGTAGGTTCTGCTGGAGGAATACAACTGTTTGGTGTTT
TAAATTTAAGTGTAGAAATTGTAGAAATGTGGAATTAGCACAGATCCTTCCCTGGCCTTTCTGTTTCACTTGATCATT
TAGCCCAGACCACCCAGGATGTTTTCCAAAATGTTCCACAGGCGTGTCCCGCTGGATCCATTTGTCTTGTCACT
TGGAGAAAGGCCAGTCCCTGTGACGGGGCAGCCCTCTCTGTCCCTCGGTCAGCTCGTGTGAATCCTGGGACCTCT
TCCGCTCGGCTCTGCCCGCTGTTCTGGGGTCGACTGCCACGACTTTTGATTCAAGAAGCTTCTCCAGGCGGGAG
CGGCTATTTTTCTAAATGAGAATTGTTACATTGCAAATTGTTGAATAAAATATTTTGCCTCCTTCAA

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FIGURE 2848

METLCAPQVCPLPLNSTTEAVHMLPHAGAPPLDVTYPAPEKRPSARTQGPVKCESPATTLWAQSELPDFGGNVLL
APAAPALYVCAKQPFPVVPPEEAMSGQQSRNPSSAAPVQSRGGIGASENLENPPKMGEEEALQSQASSGYASLL
SSPPTESLQNPPVLIAQPDHSYNLAQPINFSVLSNSHEKNQSWREALVGDRPAVSSWALGGDSGENTSLSGIPT
SSVLSLSLSPSSVAQSNFPQSGGASEMVSNOBANLLVQPPSQPVENLVPEQKDRKAGSALPGFANSPAGSTSVV
LVPPAHGTLVPDGNKANHSSHQEDTYGALDFTLSRTLENPVNVNPSHSDSLASQQSVASHPRQSGPGAPNLDRF
YQQVTKDAQGQPLERAAQQLVPPQQQASPPQLPKAMFSELSNPESLPAQGQAQNSAQSPASLVLDAGQQLPPR
PPQSSSVSLVSSSGQAAPVSEQPWPQVPALAPGPPQDLAAYYYRPLYDAYQPQYSLPYPPPEPGAASLYYQD
VYSLYEPRYRPYDGAASAYAQNRYRYPEPERPSSRASHSSERPPPRQGYPEGYYSSKSGWSSQSDYYASYSSQYD
YGDPGHWDRIYHSARVRDPRTYDRRYWCDAEYDAYRREHSAGDRPEKRDNNWRYDPRFTGSFDDDPDHRDPYG
EEVDRRSVHSEHSARSLSAHSASLRSSLSHSHQSQIYRSHNVAAGSYEAPLPPGSFHGDFAYGTYRSNFFSSG
PGFPEYGYPADTVWPAMEQVSSRPTSPKFSVPHVCARFGPGGQLIKVIPNLPSEGQPALVEVHSMEALLQHTSE
QEEMRAFPGLAKDDTHKVDVINFAQNKAMKCLQENENLIDKESASLLWNFIVLLCRQNGTVVGTDAEALLRDHR
TVWLP GKSPNEANLIDFTNEAVEQVEEESGEAQLSFLTGGPAAAASSLERETERFRELLLYGRKKDALESAMKN
GLWGHALLLASKMDSRTHARVMTRFANSLPINDPLQTVYQLMSGRMPAASTCCGDEKWDWRPHLAMVLSNLNNN
MDVESRTMATMGDTLASRGLLDAAHFCYLMQAAGFGVYTKKTKLVLIGSNHSLPFLKFATNEAIQRTAEYEAQ
SLGAETCPLPSFQVFKFIYSCRLAEMGLATQAFHYCEAIAKSILTQPHLYSPVLISQLVQMASQLRLFDPLKEK
PEEESLAAPTWLVLHQQVERQIKEGAGVWHQDGLPQQCPGTPSSEMEQLDRPGLSQPGALGIANPLAVPAPSP
EHSSPSVRLLPAPQTLPDGPLASPARVPMFPVPLPPGPLEPGPGCVTPGPALGFLEPSGPGLPVPPVLPQERRH
LLQEARSPDPGIVPQEAQVGNLSLSELENFDGKFANLTPSRTVPDSEAPPGWDRADSGPTQPPVLSLSPAPETKR
PGQAAKKETKEPKKGESWFFRWLP GKKKTEAYLPDDKNKSIWDEKKNQWVNLNEPEEEKKAPPPPTSMFKTVQ
AAPPALPGPPGAPVNMYSRRAAGTRARYVDVLNPSGTQRSEPALAPADFVAPLAPLPISNLFVPTDAEEPQLP
DGTGREGPAAARGLANPEPAPEPKVLSSAASLPGSELPSSRPEGSQGEAPGDLPAAGGPPSGAMFFYNPAQLAQ
ACATSGSSRLGRIGQRKHLVLN

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FIGURE 2849

AGACGCAAGATGCGGGCTGTGGTGCTGGCGGCGACGCGGTTGCTGCGGGGCTCGGGTTCTTGGGGCTGTTTCGCGG
CTGAGGTTTGGACCTCTGCGTACAGACGGTTTAGTAGTGGTGGTGCCTATCCCAACATCCCCCTCTCTTCTCCC
TTACCTGGAGTACCCAAGCCTGTTTTTGTACAGTTGATGGACAGGAAAAGTTTGAAACCAAAGTAACCACATTG
GATAATGGGCTTCGCGTGGCATCTCAGAAATAAGTTTGGACAGTTTTGTACAGTAGGAATTCTTATCAATTCAGGA
TCGAGATATGAAGCGAAATACCTTAGTGGAAATTGCTCACTTTTTGGAAAAATTGGCATTTCGTCTACTGCTCGA
TTTGACAGCAAAGATGAAATTCTGCTTACGTTGGAAAAGCATGGGGGTATCTGTGACTGCCAGACATCAAGAGAC
ACCACCATGTATGCTGTGCTGCTGATAGCAAAGGCTTGGACACGGTGGTTGCCTTACTGGCTGATGTGGTTCTG
CAGCCCCGGCTAACAGATGAAGAAGTCGAGATGACGCGGATGGCGGTCCAGTTTGAGCTGGAGGACCTGAACCTG
CGGCCTGACCCAGAGCCACTTCTCACCAGATGATTTCATGAAGCGGCTTACAGGGAGAACACAGTTGGCCTCCAC
CGTTTCTGCCCCACAGAAAACGTAGCAAAGATCAACCGAGAGGTGCTGCATTCTACCTGAGGAACTACTACACT
CCCGACCGCATGGTGCTGGCCGGCGTGGGCGTGGAGCAGGAGCATCTGGTGGACTGTGCCCGGAAGTACCTCCTG
GGGGTCCAGCCGGCTGGGGGAGCGCAGAGGCCGTTGGATATTGACAGATCTGTGGCCAGTACACTGGGGGGATT
GCCAAGCTAGAAAGAGACATGTCCAATGTCAGCCTGGGCCCGACCCCCATCCCCGAGCTCACGCACATCATGGTT
GGACTGGAGAGCTGCTCCTTCTGGAGGAGGACTTCATCCCCTTTGCAGTGTGAACATGATGATGGGCGGAGGT
GGCTCCTTCTCGGCTGGTGGGCCCCGGCAAGGGCATGTTCTCCAGGCTCTACCTCAACGTGCTCAACAGGCACCAC
TGGATGTATAACGCGACCTCCTACCACCACAGCTACGAGGACACTGGCCTCCTTTGCATCCATGCCAGCGCCGAC
CCAAGACAGGTTTCGAGAAATGGTAGAAATCATCACAAGGAGTTTATTTTAATGGGCGGAACCGTGGACACGGTG
GAGCTGGAACGAGCCAAGACGCAGCTGACATCAATGCTCATGATGAACCTGGAATCCAGGCCTGTGATCTTCGAG
GATGTGGGGAGGCAGGTGCTGGCCACTCGCTCCAGAAAGCTGCCGCACGAGCTGTGCACGCTCATCCGCAACGTG
AAGCCGGAAGATGTGAAGAGAGTCGCTTCTAAGATGCTCCGAGGGAAGCCGGCAGTGGCCGCCCTGGGTGACCTG
ACTGACCTGCCACGTATGAGCACATCCAGACCGCCTGTGAGTAAGGACGGGCGCCTGCCAGGACGTACCGG
CTCTTCCGGTTAGAACCCTCCCCGGCCTGACAGACCCAGGGAGCTGCAGCTGGAGCCCCGTTCCCGTGCGTGTAG
TTTGACACGAATTTAGTCTAAAAAGCTGTCTGGTTGTATAAACGGTGCAAACAATGTGCCCACAGCACCCACGC
GGTTTGCATTCTTTTGGAACTCAATGTGCCGATCAGTGGAGTCAGTATCGAGCCTGACCACCGCAAGCCAGGAAG
CAGGTGAAGTGCCAGCGCTGGAGTGCAGCGTGCCACGAGGAGGGCGGTGCGGTGCTTCCCTCCTCGGGCTGTGGG
CACATGGGGCCCCGAGGTTCTTGGAGGAGCCCTGAGCTGGGAGGCAGCAAAGGCTGACCTATCAAAGCCTCCC
GGAGGCCACCGTGCTGGGTACCAGGACTCACCTCTGACAAGCAGGAGAAGGTAAGGGCCCCGGTCAGCTCCAAGGA
GCGCGCTCCACGCGCGTGCACACAGCTTCCCTGGTAATAAAGAGCTGGCATCTTTCTT

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FIGURE 2850

MAAVVLAATRLLRGSGSWGCSRLRFGPPAYRRFSSGGAYPNIPLSSPLPGVPKPVFATVDGQEKFKVTTLDNQ
LRVASQNKFGQFCTVGILINSGSRYEAKYLSGIAHFLEKLAFSSSTARFDSKDEILLTLEKHGGICDCQTSRDTTM
YAVSADSKGLD TVVALLADVVLQPRLTDEEVEMTRMAVQFELEDNLNLRPDPEPLLEMIHEAAYRENTVGLHRFC
PTENVAKINREVLHSYLRNYYTPDRMVLAGVGVEHEHLVDCARKYLLGVQPAWGSAEAVDIDRSVAQYTGGIAKL
ERDMSNVSLGPTPIPELTHIMVGLESCSFLEEDFIPFAVLNMMMGGGGSFSAGGPGKGMFSRLYLNVNLRHHWY
NATSYHHSYEDTGLLCIHASADPRQVREMVEIITKEFILMGGTVDTVELERAKTQLTSMMLMNLESRPVIFEDVG
RQVLATRSRKLPHLELCTLIRNVKPEDVKRVASKMLRGKPAVAALGDLTDLPITYEHIQTALSSKDGRLEPTYRLFR

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FIGURE 2851

GGCGGCCGAGCGGCGGGCGACGGGGCGGGCGACGGGGCGGGCGACGCGGGCCGCGGCACGGGCGGAGCCGGGG
CCATGGAGCCGCCGCTGCCGGGCTAGGCAGGTCGTGCCCCGCCGGGCCGGCGGCGATGTCGGGCTACCAGCGCCG
CCCCGGCGCCACCCCGCTGTCCCGAGCCCGGAGCCTCGCCATTCCCGACGCTCCAGCGTTCTATGAGCGCCGGTC
TTGTCTCCCCAGCTAAATTGTGAGCGCCCCCATGGCAGGGACCTGGACTCCCCCTTCTTCGGCATTTCGGCCGGC
CTTTATGTGCTATGTGCCAGCCCGGTGCTGGCTTCCGTGGGAGACACAGATTTTGGCTATGGAAGGGGAAATG
TTCTAAGCAGAGCCCGTCAGGAGCCACGGGACACATTTTGGAGATGACAGATTTGAAGATCTGGAAGAGGCAAA
TCCATTCTCTTTAGAGAGTTTCTGAAGACCAAGAACCTCGGCCTCTCGAAAGAGGATCCGGCCAGCAGAATTTA
TGCAAAGGAAGCCTCGAGGCATTCCCTGGGACTTGACCACAACCCCCACCTCCCAAACGGCGGGTATGGCCT
GGAGTATCAGCAGCCATTTTTTCAGGATCCGACAGGGGCTGGTGACCTCCTGGATGAGGAGGAGGATGAGGACAC
CGGATGGAGTGGGGCTACCTGCCGTCCGCCATCGAGCAGACTCACCCCGAGAGGGTCCCTGCCGGCACGTCGCC
CTGCAGCACATACCTTTCTTTTTCTCCACCCCGTCGGAGCTGGCAGGGCTGAGTCTCTGCCCTCGTGGGCGTT
GAGTGACACTGATTCTCGCGTGTCTCCGGCCTCTCCGGCAGGGAGTCCTAGCGCAGACTTTGCGGTTTCATGGAGA
GTCTCTGGGAGACAGGCACCTGCGGACGCTGCAGATAAGTTACGACGCACTGAAAGATGAAAATTCTAAGCTGAG
AAGAAAGCTGAATGAGGTTTCAAGCTTCTCTGAAGCTCAAACAGAAATGGTGAGGACGCTTGAAGCGGAAGTTAGA
AGCAAAAATGATCAAGGAGGAAAGCGACTACCACGACCTGGAGTCGGTGGTTCAGCAGGTGGAGCAGAACCTGGA
GCTGATGACCAAACGGGCTGTAAAGGCAGAAAACACGTCGTGAACTAAAACAGGAAATCAGTTTGCTCCAGGC
GCAGGTCTCCAATTCCAGCGAGAGAATGAAGCCCTGCGGTGCGGCCAGGGTGCCAGCCTGACCGTGGTGAAGCA
GAACGCCGACGTGGCCCTGCAGAACCTCCGGGTGGTCATGAACAGTGCACAGGCTTCCATCAAGCAACTGGTTTC
CGGAGCTGAGACACTGAATCTTGTTGCCGAAATCCTTAAATCTATAGACAGAATTTCTGAAGTTAAAGACGAGGA
GGAAGACTCTTGAGGACCCCTGGGTGTTCTCAGCATGAAGCTCCGTGTATACCTGAGGTCAACACCGCTCGATC
TAAATGTGCAGTTGTGTCTTAAATATGCAGTCTTACCCAGAGTAAAGTGTGATCGCAAGAGTCCAGTGTCGT
GCCCTCAGCCAGTTCTTGCCACCACAATGGGAGCAGCCTGGCCGAGTTGTCTCTGTGGTTTCTATGCAGCCCT
TCTTGCGGAAATTCCTGCGATCTTATAGATTCTAATGAGCTCTTGGAAGACATTGTCATAAAAGCCAGTGATTTT
AAGAAAAAGAGTGGTTCTGGAATCAATGTTTTCCAGTCCCATCCCAGAACATCAGTTGTAAGATAAGTACAATTG
GTTGTCTTGAATTCATAAGTAGAACAACACTAAATGTGCCTCTGAGATGGCCACCCCGGGCAGGGACCTGTGC
CTTCCGCCGATGCTCAGGGCTCCCTCTGGCTCCCGGGTCACTCTTGTGGCCCCAGTGGGTGGTCCCTGCAGTCAT
GGCCTGAGTGCGCAGGGGCCACCGCGTGGCTGCTGCTGTCTCCTCCGGGACCCACGGGGACCAAGGTCACACGT
TCCGTGCTGTGAAGCTGTCCAGATGTGCCTCTTGGCTGGGGGTCTGGTGGACGTTTCAAGTGGCATTGTTGTAC
AATGCAGGTTAGAATTCAGGAATTTCAAGTATGTGCCCGGTCTGTCAGGTCCAGTTGCCTTTCTGACGGCCCC
CCTCAGAGGGACGGCGATGAGCACTAAATGCTTTTTTGAATTTTCTATAGATTTTTTTTAAACTTTTTTTT
CCTCCTGTTCCAATTGATAGCTTCTTATTTAATAAATCTGTAGTTCACCGC

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FIGURE 2852

CTGTGTAGGGCATGGACACAGGGAGCTCATGGCAGGGCTGACACAGGGTGTGGTGGGCACAGGGACAGGAGGCAC
GGGAGGCTTCCCGGGATGTCTGGGAAGTGTTCAGGCCAAGGCTGGGGAGGCTGGCCAGGGCAGGTGACGGACA
GAGGCCTGGACTGGGGTAGCACCCATGAGAGGGGAGAAGTCCGGGGCAGTCGGCGGGTGCCGAGGGAGCATCCCG
AGGGCCCCGTCTTCGGACGAGGAGTGCTTCTTTGACCTGTTGACCAAGTTCCAGAGCAGCCGATGGACGACCAG
CGTTGTCCCTGGACGATGGCCAGGCCGGGGCTGCCGAGGCCACGGCCGCCCCACCCTGGAGGACAGGATCGCC
CAGCCCTCGATGACGGCCTCGCCCCAGACCGAGGAATTCTTCGACCTCATCGCCAGCTCCCAGAGCCGCCGGCTG
GACGACCAGCGGGCCAGCGTGGGCAGCCTGCCGGGGCTGCGAATCACCCACAGCAATGCAGGGCACCCTCCGAGGC
CACGGCGAGCCCCAGGAGCCGGGGGACGACTTCTTCAACATGCTCATCAAGTACCAGTCCTCCAGGATCGATGAC
CAGCGCTGCCCACCACCTGACGTACTGCCCCGGGGCCCTACCATGCCGGACGAGGACTTCTTCAGCCTCATTAG
AGGGTGCAGGCTAAGCGCATGGACGAGCAGCGGTGGACCTCGCCGGGGGCCCGGAGCAGGGGGCAGGCGGCCCCG
CCCGAGCCCCAGCAGCAGTGCCAGCCTGGTGCGAGCTAAGGCCCTGTGCCACCGCCAGGCCACCCTGCCCCCA
CTCCTGGACGCCGGTCTCACAGTCACAGCCACGTCTCTCCGAGGCCATTGCCGAGGACAGGCACTGGGCATGCAG
CCCCACGGCCTCCCCGACCCAGGGCGACAGGCTCAGGCCAAGCTGCCCGTGGTGGGAGGGCGTGCTTCCATCCCG
GGCTGGCCCCCATGGCCCTCAGCTTCTCTCCCTTCTGCCCTGCCGAGGCCGGACGGGGCCTTCGGCATGTGGC
CCCGACCTGGTGCTGTGACACTCCCGCATCCTCTCCCCCAAGCCCTTCCCGTCTGCCCTGCCCTGCCAAATGTG
AAACCCTGCTGTCTCCCCACCCTCCCCAAAGGTGTCTCTGAGCCGCTCTTGGGGCCACCAAGGACAGGGCCAT
GTTCTGTCCCCCAGAGCTGGTCTTGGGATGGCCGTGTGACAGGCATGCTCCACCCCTCCAGCTTCGTCTCTGGG
CAGGGCTCCCTCCAAGCCTGTCTCCCCACTCCCCGGCCAGAGGTGAGCAACCACAGAAGGCCCCCAGACCACGC
ATGGCAGACCAGGCTGCAGTGGCAGCCCTGAGGTGCCCCCGCCGAGTCCCAGGGCCCTGCAGGGGCCTCGACAG
GAGCCGGGCCTATCTCTAAAGCAGAGGGAATGGCTGGGCATGAACCTCGACATTCCAAAACCCCAAGCCAGGAAA
AAGGGCAGGGCCTGGTCTTAGGGATGCTTACTGGCAGCAAGAGCAGTGCCAGTCAGGGTGGGAGGTAGCACCAG
GCTCTGTGACCCTCACCCAAGTGGGGGGTGGTCAAGTGGGAAGCTGGGGAGGCTTCACTCAGCTCAACCTGCGAGA
CCCCCATATGAGAACCCCCCTCTCCACCAGCTGGGGGAGATGACATCACTGCTCTCTCCATGGGGAGGGGGC
TCACAGGGCACCAAGTTCGGGATCCTAGGACTGGCAGGACCTGCTGGAGCCTGAGATGGGCCCCAGGGGCCCTGAG
GTTGCCTCCTCTGTCCAGACCCAGCCTTGGCACCTCCCAAGACTGCCAAGGGCCCTACCATGGCCCCACAGCCC
CCAGGGCTGGCAGTTCCATCTAGGAGGGTGCCTCTAGGCCCACTCTCAGGCTAGGATGGAGAGGCAGATCTGGG
CCTGGTGAGGTGACCTGCTTCTGGAGGGGCAGGGCCGCACCCGAGAGCAGGGACAGGTGCCCGAACACAGGGTCT
CCAGGACGTAGCGCCCCCGCATACTTGAATGTATGTGCGTATTTATTGCTCACGTCTGTGCCATGTTGTCAAT
GGGTCTTTTCCAACCAAGAGGTACATTTGTTTTTCTGTTTTCTGAAAAATAAAGTCGGCCAAAGTGAG

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FIGURE 2853

MALSFLPSAPAAAGRTGPSACRPRFGAVRLPHPLPQALPVLPCPAKCETLLSPPPSPKVSLSRLLGPPRTGPCSVP
PELVLGWPCDRHAPPLQLRPGAGLPPLSPHSPARGQQPQKAPQTTHGRPGCSGSPEVPPAESQGPAGASTGAGP
ISKAEGMAGHELHRHSKTPSQEKGQGLVLGMLTGSKSSAQSGWEVAPGSVTLTQVGGWSVEAGEASLSSTLQTPHM
RTPLLPAGGDDITALSMGRGLTGHQVRDPRTGRTCWSLRWAPGA

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FIGURE 2854

CTCGTGGACACCTGCCACCGGGCCATGAGGACCACCTTCCTCCACATCTCCAAGACCCCCAGGAGAACGGGGCC
ACTGCGGGGTCTGGCGTGCAGCCGGCCCAGTAGCCCAGACCACGGCAGGGCATGACCTGGGGAGGGCAGGTGGAA
GCCGATGGCTGGAGGATGGGCAGAGGGGACTCGCGCCCACGGCACCTCTGGGAGCTGGGATGATAAAGATGAGGC
TTGCGGCTGTGGCCCGCTGGTGGGCTGAGCCACAAGGCCCCCGATGGCCCAGGAGCAGATGGGAGGACCCGAGG
CCAGACGCACACTGTCCGAGCCCTCTGCTCAGCCGCCTGGGACCCACCAGGGTGCAGCTGGGCTCCAGGGTCCAG
CCCACAAGCTGCATCAGGCTCTCTGGGAGAGGAGGGGCCTGGAGGGCCAGGAGTCCCAGACTCACGCACCCTGGG
CCACAGGGAGCCGGGAATCGGGGCCTGCTGCTCCTGCTGGCCTGGAAGACTCTGTGGGGTCAGCACTGTACTCCG
TTGCTGTTTTTTTATAAACACACTCTTGGAAGTGGCTGGGGAGCTGTGGTCACTCACAGGGCGGGCAGGTGACCA
GGGCGGTGGAGGCGACGCTGTGTCTTCCCAGCTGCCCTGCCTAGAGGCCAGGGTGCAGGCACCGCCACCCACCC
GTGTTCCCTATCCAGGAGTGGACCCACATCACCT

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FIGURE 2855

CGCGGGGAGAGAAGCGGGAGCGGGAGCGGGAGCGAGCTGGCGGCGCCGTCGGGCGCCGGGCGGGCC**ATGG**AGCTG
TGGCCGTGTCTGGCCGCGGCGCTGCTGTTGCTGCTGCTGCTGGTGCAGCTGAGCCGCGCGGCGGAGTTCTACGCC
AAGGTCGCCCTGTACTGCGCGCTGTGCTTCACGGTGTCCGCCGTGGCCTCGCTCGTCTGCCTGCTGCGCCACGGC
GGCCGGACGGTGGAGAACATGAGCATCATCGGCTGGTTCGTGCGAAGCTTCAAGTACTTTTACGGGCTCCGCTTC
GAGGTGCGGGACCCGCGCAGGCTGCAGGAGGCCCGTCCCTGTGTCATCGTCTCCAACCACCAGAGCATCCTGGAC
ATGATGGGCTCATGGAGGTCCTTCCGGAGCGCTGCGTGCAGATCGCCAAGCGGGAGCTGCTCTTCTGGGGCCC
GTGGGCTCATCATGTACCTCGGGGCGTCTTCTTCATCAACCGGCAGCGCTCTAGCACTGCCATGACAGTGATG
GCCGACCTGGGCGAGCGCATGGTCAGGGAGAACCTCAAAGTGTGGATCTATCCGAGGGTACTCGCAACGACAAT
GGGGACCTGCTGCCTTTTAAGAAGGGCGCCTTCTACCTGGCAGTCCAGGCACAGGTGCCCATCGTCCCCGTGGTG
TACTCTTCTTCTCCTCCTTCTACAACACCAAGAAGAAGTTCTTCACTTCAGGAACAGTACAGTGCAGGTGCTG
GAAGCCATCCCCACCAGCGGCCTCACTGCGGCGGACGTCCCTGCGCTCGTGGACACCTGCCACCGGGCCATGAGG
ACCACCTTCTCCACATCTCCAAGACCCCCAGGAGAACGGGGCCACTGCGGGGTCTGGCGTGCAGCCGGCCCCAG
TAGCCCAGACCACGGCAGGGCATGACCTGGGGAGGGCAGGTGGAAGCCGATGGCTGGAGGATGGGCAGAGGGGAC
TCTCCCCGGCTTCCAAATACCACTCTGTCCGGCTCCCCAGCTCTCACTCAGCCCAGGGAAGCAGGAAGCCCCCTT
TGTCAGTGGCTCAGACACAGGCCCCCTGGTGTCCCCTGCAGGGGGCTCAGCTGGACCCTCCCCGGGCTCGAGGGC
AGGGACTCGCGCCACGGCACCTCTGGGAGCTGGGATGATAAAGATGAGGCTTGCGGCTGTGGCCGCTGGTGGG
CTGAGCCACAAGGCCCCCGATGGCCAGGAGCAGATGGGAGGACCCGAGGCCAGACGCACACTGTCCGAGCCCT
CTGCTCAGCCGCTGGGACCCACAGGGTGCAGCTGGGCTCCAGGGTCCAGCCCACAAGCTGCATCAGGCTCTCT
GGGAGAGGAGGGGCTGGAGGGCCAGGAGTCCCAGACTCACGCACCCTGGGCCACAGGGAGCCGGGAATCGGGC
CTGCTGCTCCTGCTGGCCTGGAAGACTCTGTGGGGTCAGCACTGTACTCCGTTGCTGTTTTTTATAAACACACT
CTTGGAAGTGG

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FIGURE 2856

MELWPCLAAALLLLLLLVQLSRAAEFYAKVALYCALCFTVSAVASLVCLLRHGGRTVENMSIIGWFVRSFKYFYG
LRFEVRDPRRLQEARPCVIVSNHQSILDMMGLMEVLPERCVQIAKRELLFLGPVGLIMYLGGVFFINRQRSSTAM
TVMADLGERMVRENKLVWIYPEGTRNDNGDLLPFKKGAFYLAVQAQVPVVPVYSSFSSFYNTKKKFFTS GTVTV
QVLEAIPTSGLTAADVPALVDTCHRAMRTTFLHISKTPQENGATAGSGVQPAQ

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FIGURE 2857

GGCGCCTGGCGCACCTGGTGCTCTTCTGCCCTTCTCCAAGCGCCTGCAGGGCCGGCTCCCAGGCCTCAGGGTCC
GCTGCATCTTCTGGCCTGGCTGGGCGTCTTTGCAGGCAGCTGGCTGGTGTACGTGCACTACTCGTCCTACTCGG
AGCGCTGTCGCGGCCATGTCTGCCAGGTGGTCATTTGTGACCAGTACCGCAAGGGGATCATCTCGGGCTCCGTCT
GCCAGGACCTGTGTGAGCTGCATATGGTGGAGTGGAGGACCTGCCTCTCGGTGGCCCCGGGCCAGCAGGTGTACA
GCGGGCTCTGGCGGGACAAGGATGTAACCATCAAGTGTGGCATTGAGGAGACCCTCGACTCCAAGGCCCGGTCTCGG
ATGCGGGCCCCCGGGCGGGAGCTGGTACTGTTTGACAAGCCCCCGGGGCACCTCCATCAAGGAATTCCGGGAGA
TGACCCTCAGCTTCCTCAAGGCGAACCTGGGAGACCTGCCTTCCCTGCCGGCGCTGGTTGGCCAGGTCTTGCTCA
TGGCTGACTTCAACAAGGACAACCGGGTGTCCCTGGCGGAAGCCAAGTCCGTGTGGGCCCTGCTGCAGCGTAACG
AGTTCTGCTGCTGCTGTCCCTGCAGGAGAAGGAGCACGCCTCCAGACTGCTGGGCTACTGTGGGGACCTCTACC
TCACCGAGGGCGTGCCGCTGGCGCCTGGCACGCGGGCGCCCTTCCACCCCTGTTGCGCCCACTGCTGCCGCTG
CCCTGCAGGGTGCTCTCCAGCAGTGGCTGGGGCTGCGTGGCCTTGGCGGGCCAAGATCGCCATCGGCCTGCTGG
AGTTCTGAGGAGCTCTTCCACGGCTCTTACGGGACTTTCTACATGTGTGAGACCACACTGGCCAACGTGGGCT
ACACAGCCACCTACGACTTCAAGATGGCCGACCTGCAGCAGGTGGCACCCGAGGCCACCGTGCGCCGCTTCTGC
AGGGCCCGCTGCGAGCACAGCACCGACTGCACCTACGGGCGCGACTGCAGGGCCCCGTGTGACAGGCTCATGA
GGCAGTGCAAGGGCGACCTCATCCAGCCCAACCTGGCCAAGGTGTGCGCACTGCTACGGGGCTACCTGCTGCCTG
GCGCGCCCGCCGACCTCCGCGAGGAGCTGGGCACACAGCTGCGCACCTGTACCACGCTGAGCGGGCTGGCCAGCC
AGGTGGAGGGCCATCACTCGCTGGTGTCTAGCCACCTCAAGACTCTGCTCTGGAAGAAGATCTCCAACACCAAGT
ACTCTTGAAGGGGAGTGAGGGGCTGGCCAACCTTCTGGAGCTGGCCAGGTGCCAGGGTCCAACCTTCCCTCA
AGGAATCCTGTCAGAAGATGTGAAATGCAACTGTGTTGCAAAATCACTCCCCTACCGTCAGGGCTCTGGATTCCA
GCACCACAGACATGAGACCCAGCTCGGAGCAAAGGCGGACATGGACATCCCGGCAGGAGAGTCTCCAAGGGG
TTTGTTACTCTGAAGAACGTAATGTCAATAAACAGCTTTTATGTAATGCCAGGGCTG

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FIGURE 2858

MVEWRTCLSVAPGQQVYSGLWRDKDVTIKCGIETLDSKARSDAAPRRELVLFDKPTRGTSIKEFREMTLSFLKA
NLGDLPSLPALVGQVLLMADFNKDNRVSLAEAKSVWALLQRNEFLLLLSLQEKEHASRLLGYCGDLYLTEGVPHG
AWHAAALPPLLRPLLPPALQALQQWLGPWPWRAKIAIGLLEFVEELFHGSYGTTFYMCETTLANVGYTATYDFK
MADLQQVAPEATVRRFLQGRRCHESTDCTYGRDCRAPCDRLMRQCKGDLIQPNLAKVCALLRGYLLPGAPADLRE
ELGTQLRTCTTSLGLASQVEAHHSVLVSHLKTLLWKKISNTKYS

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FIGURE 2859

CTCTGCGTGCGCCGGAGGCTGCCGTGGCGGGTGGGCCGCTGACTTCTCCTCCCGGCCAGTTCTCGAGCGCCTCA
CCGGGCTTCGCCCTGAGCCTCGCTCTCGCTGGCGCTGCGCGGCCTAGGGGACTGGGCTGCTGGCCTCCGGGTGC
GGGGTGGGGGCAGGCTCCGACCTGGGGCGTCTTGCCGCGCGAGCCGCGGGATGGGGGCCCGGGCCGCGGAGGAG
GCGCCGCTGGTGTGTCCCTTGGTGGAGAGGGCGCTGCCGGCCCTGCGCGGTTTCCAGCCAGGAAGCTTCGGGAAG
CCTGGACGTCTGCTCACTGGAGATGACACGTGCGTGGGGTGTGGCATTCTTGTTATTTAACACGGGAAGGAGGT
GACTTCGCCTGTGATGGACTTCCAGTGTGAGCACTGGCCAGAGTGACCAGGCTGACCAGCACCAGCCCTGATCCA
GATGCAGAGGCCAGGATGTGGGCCCAGCCCTGTGCCAGGAGGCTGGCTGGAATAAAGGTACAGATAGAGGCCTCA
CCCCCTCTGGGACCACTGGCACTCAGGGTGTTCAGCCTCAGAGCCCACCTGCCCCCAGGGCCACAGCTGCATC
TCCTGCCCTGCTGTCATTACAGGGATGGGCAGGCTGGCATGGGGGCAGCCGCTGCCCTGCCTGGGTGTTGCTGT
GTATTCCTGCCGGCCAGGGGCCACTGCCAGGACCACGCCTCCCTTTTCATATCCCGATTCTTAAGTTCTGCTATT
GTGGTATTCTGGTGGAGAAAAAAGAACC GCGTGGCTGTTTTTGAAGTGCCTGGAACCTAAGACCCTGAATTCCTT
TCCCCC AAGGGGAAAATCTATATGGAAAACATTTATTTTAAAATACAGGATGAAGTGAATTAAGATTTAAA
TGCACATTTCTTTAAGGATAATATTTCTGTGTGGCAAAATTTGAGAGTAAATTGGTCTTGAATGGAATGGATTG
TCTTGACTCACACATTGCGGAGCAGAGCCCCCCTGAAGAAAGGTGTTGCTGTGGTGGGATCTTCCCACGAGGGT
CCTTGCCTGTTCTCCTAGGGGATGGTTGCTGGGTGCCCTGGGCTACTGGGGAGAGCGTACGGGGCTGGAGAAGAT
GGCCATTCTGGGCTGTTTCTAGGGAATGAGTTGTACATCTCATGGCTGGATTTTGTAATCAGTTTTTAAAA
TACCGCATATATCTGTTTTCTTACTGG

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FIGURE 2860

GGCACGAGGCCGAGCCCTGCCAACCATGGTGAACCTGGGTCTGTCCCGGGTGGACGACGCCGTGGCTGCCAAGCA
CCCGGGACTCGGGGAGTATGCCGCATGCCAGTCACACGCCTTCATGAAGGGCGTTTTACCTTCGTACAGGCAC
CGGCATGGCCTTTGGCTTGCGAGATGTTTCATTGAGAGGAAGTTTCCATACCCCTTTCAGTGGAGCCTCCTAGTGGC
CGTGGTTGCAGGCTCTGTGGTCAGCTACGGGGTGACGAGAGTGGAGTCGGAGAAATGCAACAACCTCTGGCTCTT
CCTGGAGACCGGGCAGCTCCCCAAAGACAGGAGCACAGATCAGAGAAGCTTACGAGAGCTCCAGCAGGGGCACAGA
GGATTGGGGGCAGGAGGAGTCTGGAACACAGCCTTCATGCCCCCTGACCCAGCCCGACCTCCCCACACCCTAG
GGTACCCAGTCGTATCCTCTGTCCGCATGTGTGGCCAGGCCTGACAAACACCTGCAGATGGCTGCTGCCCCAAC
CTGGGACCTGCCCAGGAGGTTGGAGCAGAAAGGGCTCTCCCTGGGGTGGTGTCTCTCTAGGGTATTGGGATG
CATGTTCTGCACTGCCAGCAGAGAGGGTGTGTCTGGGGGCCACCACCTATGGGACACGGGGTCGAAGGGGCCTGT
ACACTCTGTCAATTCCTTTCTAGCCCTGCATCTCCAACAAGTCCAAGGTGACAGCTGGTGCTAGGGGCGTGGGG
TTAATAAATGGCTTATCCTTCTCTCCAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2861

MVNLGLSRVDDAVAAKHPGLGEYAAACQSHAFMKGVTFVTGTGMAFGLQMF IQRKFPYPLQWSLLVAVVAGSVVS
YGVTRVESEKCNNLWLFLETGQLPKDRSTDQRS

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FIGURE 2862

GGGGACTCCGGGAGGAGGAACATGGCCGTGGCGGACCTCGCTCTCATTCTGATGTGGACATCGACTCCGACGGC
GTCTTCAAGTATGTGCTGATCCGAGTCCACTCGGCTCCCCGCTCCGGGCTCCGGCTGCAGAGAGCAAGGAGATCG
TGCGCGGCTACAAGTGGGCTGAGTACCATGCGGACATCTACGACAAAGTGTCGGGCGACATGCAGAAGCAAGGCT
GCGACTGTGAGTGTCTGGGCGGCGGGCGCATCTCCCACCAGAGTCAGGACAAGAAGATTACGTGTACGGCTATT
CCATGGCCTATGGTCCTGCCCAGCACGCCATTTCAACTGAGAAAATCAAAGCCAAGTACCCGACTACGAGGTCA
CCTGGGCTAACGACGGCTACTGAGCACTCCCAGCCCGGGGCTGCTGCCTCCAGCAGCCACTTCAGAGCCCCGCC
TTTGCTGCACTCCTCTTGACAGGGCTGGCCCTGCCTGCTCCTGCGGCAGCCTCTGGTGACGTGCTGTCCACCAGG
CCTTGGAGACAGGCTAGCCTGGCCACAGAATTAAACGTGTTGCCACACCTGCCGGCTTCTTAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAA

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FIGURE 2863

MAVADLALIPDVIDSDGVFKYVLIRVHSAPRSGLRRLQRARRSCAATSGLSTMRTSTTKCRATCRSKAATVSVWA
AGASPTRVTRRFTCTAIPWPMVLPSTPFQLRKSKPSTPTTRSPGLTTATEHSQPGACCLQQPLQSPAFACTPLA
GLALPAPAAASGDVLSTRPWRQASLATELNVLPHLPAS

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FIGURE 2864

CCGGACGGACGCTCGTCTTCGCCCCGCCATGGCCGAGAGCGACTGGGACACGGTGACGGTGCTGCGCAAGAAGGGC
CCTACGGCCGCCCAGGCCAAATCCAAGCAGGCTATCTTAGCGGCACAGAGACGAGGAGAAGATGTGGAGACTTCC
AAGAAATGGGCTGCTGGCCAGAACAACAACATTCTATTACCAAGAACACGGCCAAGCTGGACCGGGAGACAGAG
GAGCTGCACCATGACAGGGTGACCCTGGAGGTGGGCAAGGTGATCCAGCAAGGTCGGCAGAGCAAGGGGCTTACG
CAGAAGGACCTGGCCACGAAAATCAATGAGAAGCCACAGGTGATCGCGGACTATGAGAGCGGACGGGGCCATACCC
AATAACCAGGTGCTTGGCAAAATCGAGCGGGCCATTGGCCTCAAGCTCCGGGGAAAGGACATTGGAAAGCCCATC
GAGAAGGGGCCTAGGGCGAAATTGAACACAAAGCCTCGAAATCAGTGCGCTCCAGCTGATCTCGTTCCGCCGGTTC
CCCTTGGCCGCCAGTTCGGTTCCTCACGGGCCGAACGGAACAAGGGGTCCAGCTTGCGGGGGACCCCTCCCCAG
CCATTCTGCTGTCAAACAAACAAAACCTTGCAAAGCG

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FIGURE 2865

MAESDWDTVTVLRKKGPTAAQAKSKQAILAAQRRGEDVETSKKWAAGQNKQHSITKNTAKLDRETEELHHDVTL
EVGKVIQQGRQSKGLTQKDLATKINEKPQVIADYESGRAIPNNQVLGKIERAIGLKLRGKDIGKPIEKGPRAK

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FIGURE 2866

ACGGCAACGGGGGCCTCTACTGCGCGCTGGAGGACCACAAGATCCTGGAGGACATGGAGCGCCGGGGAGTGGAGT
TTGTGCACGTGTACTGTGTGGACAACATCCTGGTGCGGCTGGCGGACCCCTGTCTTCATCGGCTTCTGTGTGTTGC
AGGGCGCAGACTGTGGCGCCAAGGTGGTGGAAAAGGCATACCCCGAGGAGCCCGTGGGCGTGGTGTGCCAGGTGG
ACGGTGTCCCCAGGTGGTGGAGTACAGCGAGATCAGTCTGAGACCGCACAGCTACGTGCCTCCGACGGGAGCC
TGCTGTACAATGCAGGCAACATCTGCAACCCTTCTTACCCGAGGCTTCCTTAAGGCGGTACCAGGGAGTTTG
AGCCTTTGCTGAAGCCACACGTGGCTGTGAAGAAGGTCCCGTATGTGGATGAGGAGGGGAATCTGGTAAAGCCGC
TAAAACCGAACGGGATAAAGATGGAGAAGTTTGTGTTTGATGTGTTCCGGTTTGCTAAGAACTTTGCTGCCTTGG
AAGTGCTGCGGGAGGAGGAATTTTCCCCACTGAAGAACGCAGAGCCAGCCGACAGGGACAGTCCCCGCACCGCTC
GCCAGGCCCTGCTCACCAGCACTACCGGTGGGCTCTGCGGGCCGGGGCCCGCTTCCTGGATGCCCATGGGGCCT
GGCTCCAGAGCTGCCAGCTTGCCCCAAATGGAGACCTCCGGCCATCTGTGAGATATCGCCCTTGGTGTCTT
ACTCTGGAGAGGGTTTAGAAGTGTACCTGCAAGGCCGGGAGTTCCAGTCCCCGCTCATCTGGATGAAGACCAGG
CCAGGGAGCCGAGCTGCAGGAGTCCGACCCGCCAGACTGTCCCCAGACTCCCCCGAGACCTGCCAGCCCCGG
CATCTGGAAGTCCCGACTCCCCCAGACCTGCCAGCCCCGGCGTCTTGAGCTGGGGGCTACAGCCCAGCCTGA
GCTCTGGGTGGGAAAGCAGCCTGCCCATGCTTCCAGCCTGCAGAACACAGAATGAAACATGCTGGTAGACTCCA
CGAGGGCAGGGCCTCTCCTGTGCGCTCTGGACACAAGTGGCGACAGCCTGCTGGGGGCTCTGTGGCTCCATTCT
GGCTGTGGGGTCTAGTCAAGAGGCAGAGGGACTTGGGACCTGGGAGAATGGGGCTGAGAGGAGGCTTCGGGTGG
GGCCCAAGGGAGGTGTGGTGTCTCTGGGGAGAACAGGAGGGCATGTCCCTTTGGGAGCCCGCCTTGTGGATCCA
CCACACCCACCGAGCACTAGAAGCTGCATAAGCTACACAGGATGTGCTTCTGCAGCCTACAGATGCAGAACAG
AATGAGGGGGACAATTCCACCCACTCGAGGGCTGCCCTCTTCTTAGCAGACGAACAGTAATGGGGGCAAGG
CTGGGGCATCCCAGCCACACACCCTGGATGCCAGCAAGGCCACAGAAAGAGCCTGATGTCCATGATCCAGGTG
GCTCTGAGAAGCTTGGCCTGGACACCTGAGCCTGCGGCCGGTACTCCTGCCTTCTCCCCATCTATCCCCAAGGCC
TCTGCCTCTCAGCCTCTTCCATGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT
ATGCCGGCGGGCCTCTGTGATGGTGTGCTGACTAATCCGGGATTTTCATGAGTCAGAGGCACCAACCCCTCAGCCAGC
TGCCTGCTGCTTCTGACGGATCTTGGTGTCTCAGGCTGCCTGGCTCTCCGAGTGAGGACGCAGCCTCCATATTGG
TGCACCTCAGGCATGGCTGGGACAAGCCAGCTGCCCCAGGGTCTTCCCCGGTGATTCTCGCCTGCTTTCTCATC
TCAGGGGAGGCAGTGGCACCTCCCTCTCCCTGCTGACATGAAGAGAGCTATGATATGCCACTGCTGCCAACTCAT
CCTCTGCCCCACCTCGAAACCCACAGTCCCCAGTGGAGGGCCACTACTCATCCCCATTGGTTTCCCAGGGGAGG
GGTGTGTCTGGAAGGGCAGGTTTCAGATGCAGCCTTCCAGATTTAGAGGCACTGGGAGGACAGTGGCTGAGTGGGA
GGCGCCAGACCTGGGCAGGCAGCAGGCTCAGGCCACACCTTGTGATTTTTGAAACCAAGCCAGAAAGATGAT
GTTTACTTCTCTCTCCCTGGCTCTGCCCTTCTTACTGCAAAACCATGCTGTGCCCTAGGGCCCTTCTCATAGCTGT
TCCTCATGGCCATGACTGGAACAGGGATGCAACCTCTTCTACACAAGCACAGTTAGTTGGGTGAAGTCTTTTTT
TTTGTGTTGTTTTAGACGGAGTTTCACTCTTGTGCCCAGGCTGGAGTGAAGTGGCGTGACCTTGGCTCACTGCAA
CCTCCAGGCCAGCCTCAGCCTCCCTAGTAGCTGGGACTACAGGCACCCACTACCACGCTGGCTAATTCTTTGTA
TTTTTAGTAGAGATGGGGTTTGACCGTGTAGCCAGGATGGTCTCGATCTCCTGACCTCGTGATCCACCCACCTC
GGCCTCCCAAAGTGCTGGGATTATAGGTGTGAGCCACCGCGCCGGGGCGGTTGCTGGCATCTTAATGTTCTGTAG
GTGGAATATTTCCAATAAACACAAGGTGCCGTAATTGACTGCT

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FIGURE 2867

MERRGVEFVHVYCVDNILVRLADPVFIGFCVLQGADCGAKVVEKAYPEEPVGVVCQVDGVPQVVEYSEISPETAQ
LRASDGSLLYNAGNICNHFFTRGFLKAVTREFEPLLKPHVAVKKVPYVDEEGLVKPLKPNGIKMEKFVFDVFRF
AKNFAALEVLREEEF SPLKNAEPADRDSPRTARQALLTQHYRWALRAGARFLDAHGAWLPPELPSLPPNGDPPAIC
EISPLVSYSGEGLEVYLQGREFQSPLILDEDQAREPQLQES

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FIGURE 2868

TGCAGGAGAAATGGCTACTCATCACACGCTGTGGATGGGACTGGCCCTGCTGGGGGTGCTGGGCGACCTGCAGGCA
GCACCGGAGGCCCAGGTCTCCGTGCAGCCCAACTTCCAGCAGGACAAGTTCTGGGGCGCTGGTTCAGCGCGGGC
CTCGCCTCCAACCTCGAGCTGGCTCCGGGAGAAGAAGGCGGCGTTGTCCATGTGCAAGTCTGTGGTGGCCCCCTGCC
ACGGATGGTGGCCTCAACCTGACCTCCACCTTCTTCAGGAAAAACCAGTGTGAGACCCGAACCATGCTGCTGCAG
CCCGCGGGGTCCCTCGGCTCCTACAGCTACCGGAGTCCCCACTGGGGCAGCACCTACTCCGTGTGAGTGGTGGAG
ACCGACTACGACCAGTACGCGCTGCTGTACAGCCAGGGCAGCAAGGGCCCTGGCGAGGACTTCCGCATGGCCACC
CTCTACAGCCGAACCCAGACCCCCAGGGCTGAGTTAAAGGAGAAATTACCGCCTTCTGCAAGGCCCAGGGCTTC
ACAGAGGATACCATTGTCTTCTGCCCCAAACCGATAAGTGCATGACGGAACAATAGGACTCCCCAGGGCTGAAG
CTGGGATCCCGGCCAGCCAGGTGACCCCCACGCTCTGGATGTCTCTGCTCTGTTTCTTCCCCGAGCCCCCTGCCCC
GGCTCCCCGCCAAAGCACCCCTGCCCCACTCGGGCTTCATCCTGCACAATAAACTCCGGAAGCAAGTCAGTTAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2869

MATHHTLWMGLALLGVLGDLQAAPQVSVQPNFQQDKFLGRWFSAGLASNSSWLREKKAALSMCKSVVAPATDG
GLNLTSTFLRKNQCETRTMLLPAGSLGSYSYRSPHWGSTYSVSVVETDQYALLYSQGSKGPGEDFRMATLYS
RTQTPRAELKEKFTAFCKAQGFTEDTIVFLPQTDKCMTEQ

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FIGURE 2870

GCGCAGGCGCAGTCTCCGCGTGCGCGCCTCGCCGGCGCCTCCATCCCGGATCCTTGCTGCAGCGTCAGCGCCGCC
GCCCCGTGCCTTTCCCTCTTCCCTCCTCCTCCTCTGGCATCCGCCTCTTCTTCCCTCCTGCGTCCTCCCCCGCTGCC
TCCGCTGCTCCCGACGCGGAGCCCCGGAGCCCGCGCCGAGCCCCCTGGCCTCGCGGTGCCATGCTGCCCCGGCGGCG
GCGCTGAAGGATGGCGACGCCGCTGCCTCCGCCCTCCCCGCGGCACCTGCGGCTGCTGCGGCTGCTGCTCTCCGG
CCTCGTCTCCTCGGCGCCGCCCTGCGTGGAGCCCGCCGCGCCACCCGGATGTAGCCGCCTGTCCCGGGAGCCTGGA
CTGTGCCCTGAAGAGGCGGGCAAGGTGTCTCTGCTGCACATGCCTGTGGGCCCTGCCTTCAGCCCTTCCAGGA
GGACCAGCAAGGGCTCTGTGTGCCCAGGATGCGCCGCCCTCCAGGCGGGGGCCGGCCCCAGCCAGACTGGAAGA
TGAGATTGACTTCCTGGCCCAGGAGCTTGCCCGGAAGGAGTCTGGACACTCAACTCCGCCCCCTACCCAAGGACCG
ACAGCGGCTCCCGGAGCCTGCCACCCTGGGCTTCTCGGCACGGGGGCAGGGGCTGGAGCTGGGCTTCCCTCCAC
TCCAGGAACCCCCACGCCCACGCCCCACACCTCCATGGGCTCCCTGTGTTCATCCGACCCGGTGCACATGTCGCC
CCTGGAGCCCCGGGGAGGGCAAGGCGACGGCTCGCCCTTGCTGCTGATCCTGGCGTTCTGTGTGGCCGGTGCAGC
CGCCCTCTCCGTAGCCTCCCTCTGCTGGTGCAGGCTGCATCGTGAGATCCGCTGACTCAGAAGGCCGACTACGC
CACTGCGAAGGCCCTGGCTCACCTGCAGCTCCCGGATCTCGCCTGGGGACCAACGGCTGGCACAGAGCGCGGA
GATGTACCACTACCAGCACCAACGGCAACAGATGCTGTGCCTGGAGCGG

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FIGURE 2871

CGGGGCTCGTGGCGTCGGGCCTGGCGGGCTCCCCGTTGGGCGGGGGCGGCGGTCCGAGCGGCTGCGGCAGCGGAA
GCGGGTCCGGGTTCGCGCAGGGCGGGGGCGGCGCAGCGGGCGGAGGCGGCCGTGGGCCGCTGGGCAGAAATGTCAC
GATGGACGAGGGCGGCACGCCCTGCTCCCCGACAGCCTGGTCTACCAGATCTTCCTGAGCCTGGGCCCCGGCCGA
CGTGCTGGCCGCCGGGCTGGTGTGCCGCAATGGCAGGCCGTGTCGCGGGACGAGTTCCTGTGGAGGGAGCAGTT
CTACCGCTACTACCAGGTGGCCCGCGACGTGCCCCGACACCCAGCGGCCATGTCCTGGTACGAGGAGTTCAGCG
GCTGTATGACACGGTGCCCTGCGTGGAGGTGCAGACGCTGCGGGAACACACAGACCAGGTCCCTGCACCTCAGCTT
CTCCCATTCGGGTACCAAGTTCGCGTCTGCTCCAAGGACTGCACTGTGAAGATCTGGAGCAACGACCTGACCAT
CTCGCTGCTGCACAGCGCGGACATGCGGCCCTACAACCTGGAGCTACACCCAGTTCTCCAGTTCAACAAGGACGA
CTCGCTACTGCTGGCCTCGGGGGTGTTCCTGGGGCCGCACAACCTCCTCATCCGGCGAGATTGCTGTCATCAGCCT
AGACTCCTTCGCGCTGCTGTCCCGCTGCGGAACAAGCCCTATGACGTGTTTGGCTGTGGCTCACCAGAGACCAG
CCTCATCTCGGGGAACCTGCACCGCATCGGAGATATCACCTCCTGCTCGGTGCTGTGGCTCAACAATGCCTTCCA
GGATGTGGAGTCAGAGAACGTCAACGTGGTGAAGCGGCTGTTCAAGATCCAGAACCTCAATGCCAGCACCGTCCG
CACGGTGATGGTGGCCGACTGCAGCCGCTTCGACAGCCCTGACCTGCTGCTGGAAGCCGGTGACCCGGCCACGTC
CCCCTGCCGCATCTTTGACCTGGGCAGCGACAACAGAXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXTCGGTACACCCCT
GCCGCCATGCTGCCCGCCTCGGTCTTAGGAGCTTGGGGAGGCCGGGCAGGGGTCTGAGGGGCAGACAGCAAGC
AAGTCCACAGGCAAAGCTGGGATCGTTCACTCGCCCTGGGGTACAAGCCAGACCTGGGGCCTGTGGGATGAG
CAGTGA AAAACAAACGCAGGCAGGGCCGCTGGCCAGCAAGCAACCGACGGGCCTGATTAGGTCTGGGGCCCCCG
AGCAGGCAGTGCCACGGACCTCTGTGGTGCTCAGACCCAGAGACACCACTGAGGTAGGAAGCTGCCCTGGAG
TGATGTCCTTGGGGCATTGGACAGGGACCCTACCGTAGCCCTCCCTGCAGGCATCAAGCAGATCCTGCCACACC
AGATGACCACGGCAGGGCCCGTGTGGGTGAGGGCCGGGGCTCCGATGCCTTCTTCGACGCGCTGGACCACGTCA
TAGACATACACGGACACATCATCGGCATGGGCCTGTGCCCCGACAACAGGTGGGCCTCTTGCCAGTGTCCAGGC
GGGGTGCCCGCAGGCGGCCACACCTAGCACAGTGCCCTCGCCAGGTACCTGTACGTGAACAGCCGCGCCTGG
CCCAACGGTGCGGTGGTGGCCGACCCCATGCAGCCGCCACCAATCGCGGAGGAGATTGACCTGCTGGTGTTTCGAC
CTCAAGACCATGCGGGAGGTGAGGCGGGCTCTGCGTGCGCACCGCGCCTACACGCCCACGACGAGTGCTTCTTC
ATCTTCCTGGACGTGAGCAGGGACTTCGTGGCCAGCGGGGGCGGAGGACCGGCACGGCTACATCTGGGACCGCCAC
TACAACATCTGTCTGGCCAGGCTGCGGCACGAGGATGTGGTCAACTCAGTGGTCTTCAGTCCCCAGGAGCAGGAG
CTGCTGCTCAGGCCAGCGACGACGCCACCATCAAAGCCTGGCGCTCCCCACGCACCATGCGCGTCCCTCCAGGCA
CCTCGCCACGGCCCTCGCACCTTCTTCTCCTGGCTTGCCAGCCAGAGGCGCTGAGGTGTGCTGGGTGCACTGGAG
CCACCGGGACCCCTTGAGGACATCGCCAGGCTCTGTGGCTTTTCCCGAGCGGGAGAGGTGGAGATGCTTATAGC
AGTTACGCCTTAGGAAGGGGACAACCAGGCCCGCCACACGCTCACACACAAACCTGCTCACGCAGCTGTGATGC
TTGGCACGGGGTGGCCAGTGAGATGGAGCCCAAGGCCCCCTCGGCCTCCTGGGCAACTGGGGTACACAGGATA
CTGGGGGTGCCGCTCCTCACTCAACCCAGGCTAGGGGTACACCTGACCCAGCTGGCCTCGGCCCCGGGGCACCTT
CGGCTGGTCTGTGGGGCCCTGGACGGTGGCCAGTGGTGGCAGGGGCTGCTCCTGGCTGTGGTTGTGCGCCCGG
GGCTTGGGAGCGGCCGGTACGCTGCTGTGGGCCGAGTGTGTGTCATGTCCACGCACCAACCCGTTACAGGGCCCT
GAATAAACAGTTGGCAACAGC

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FIGURE 2872

MDEGGTPLLPSLVYQIFLSLGPADVLAAGLVCRQWQAVSRDEFLWREQFYRYYQVARDVPRHPAAMSWYEEFQR
LYDTVPCVEVQTLREHTDQVLHLSFSHSGYQFASCSKDCTVKIWSNDLTISLLHSADMRPYNWSYTQFSQFNKDD
SLLLASGVFLGPHNSSSGEIAVISLDSFALLSRVRNKPVDVFGCWLTTETSLISGNLHRIGDITSCSVLWLNNAFQ
DVESENVNVVKRLFKIQLNASTVRTVMVADCSRFDSPDLLLEAGDPATSPCRIFDLGSDNRXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXGTPLPPCCPPRS

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FIGURE 2873

GATTATTGATTAATTTGGGCACCGCGAGGGCTCGAGTCCCCCACACCACTGCCC GGCTGCGGGGAGCACAGA
CAGCCCGGGCCCTCCCGGCTGCAGGTCCCGGGCTTTCCCGCGCGGTTGCCGGCTCCGCCCAGAGGAGCCGCGCC
CGGCGGAGGGGTAAGAAAGGCAGGGTCGCGGCGTCAACGCGGCGGCGTCTCGAGTCCAGGGCCC GCGTCTCCC
CGACCTCCCGACGCCACCTCACGGCCTCAGGGGGACTGGGCTCCCGGATCTGACCGGCTTCAAGCTCAAGCCCTA
CGTGAGCTACCTCGCCCCCTGAGAGCGAGGAGACGCCCTGACGGCCGCGCAGCTCTTCAGCGAAGCCGTGGCGCC
TGCCATCGAAAAGGACTTCAAGGACGGTACCTTCGACCTGACAACCTGGAAAAGTACGGCTTCGAGCCACACA
GGAGGGAAAGCTCTTCCAGCTCTACCCAGGAACCTCCTGCGCTAGCTGGGCGGGGAGGGGCGGCCTGCCCTCA
TCTCATTCTATTAAACGCCTTTGCCAGCTA

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FIGURE 2874

CTGAGCTGTCCCTGCAGGACTCCAGTGGAAAGTGAAAGAACTGGGCACCGGGGAAAAGCTAGGATGTCCACACTC
CTACACCATGCAGGGAAGCTCGGGCACAGGCCGGGCTGGGCCGGGATCAGATGGGAAGCAGAAGCTCATCATGACC
AGAAACTGTTTCCCTACGGAGAGCACTTGGAGATGGCAATGCTGAACCTCACACTGTAGGACTCACACACGACTC
TAACGGGATTGTAAGAATCAAGTCACTCTCATGGGAAGAATTTTTATATGGGAAAGCGGCTAAAACCTTTCATTGG
ACTGGAATGTTTGGAGATTGTTAAATTCCAAATCAGGAACCAAACTGCCCTCTAATAAGATATCAGCTGTCTA
AGCGTGTGGGTGCCGCTTTCTGCCAGTAGTTCTGGTTCTTAAGAAAAGCACCATAAATCAGACATGAAAATTCT
GGCTCCAAAAATAGCATTTCCTTGTGCAATAAAAAACGTGTGTATCAAGTATGACGTTCCTCCCAACGTGGACAC
ACTTGGTTCTCAGAAAGCCAAGCCCCGTGCAGCTGCCACATCCCAGGGCTTATGGTGCAGCAGGTGCTTTTTTC
AAGACAGGAATCAAAGTGTTAGGAACACGGCAGACAGGTGACACCTGGATACCAATGCAGGATGAGGAGTACTG
CAGAGGTCACAGGGAAGTCACAGAACAGTAATACGCTAGCAGGGGCATGGGGCGTGAAGAACAGAAGAAGACAGT
TTGAGAAAAGCATCTGCAAAATGCTAAAGAGCAGAGCTTACCTCATTGCCTGTCCCCATCCCATCCCAGGTCACC
ACCTGGCTGACCCCAGGTCCCCGACCCAACAACAACCCCTCCCAAGTCCCTAACTCCCTCACTTGGACTTGAGAC
CCTTCACAACCCAGCAGCGCTCCGCTCCAACGTGACATCATGCTTTCTGGAAACTTCCCGTATGTCCCACTTT
CCCACACTTGGTGCCCTGGAGCACCTTCCGGCTCTACATGCTGTACGTTCCCTGTGATCACCTCCTCTCGGC
CTCTGGCCAAACAGTCCCAACCATCTGTGGGTAAACAAGGGGGTGTGTGTGTTCTTTTCAGCCTTGCTAAACTGT
CTGAATCAAGGATCACAAACTACAGCCTGCAGGCCAAAGCCAGCCCACAGCCTGTGTTTGTAATAAAGCTTTAT
TGGAACAAAGCCACACCCCTTAATCTACAGATGATCTGTGGCTACTTTACACCACAACAGAGTACCATGGTTCT
GACAGAGACTGGGGGACCCTGTCTAAATGACTTCTGACCTGGACCTTTACTGAAAATCCTCCCAATCATTCTGTT
GACAAGATGGTGTATTACTTTTTGCAATAAGAAACAAGTAACCTTTGCAGAATTCCACCCATCTTTCAAGGCTG
ATCCCAGAAGTTCCCTCTGCCCACGCACCTACCTGATCCTGATCACTTCCTAAACTGCAGCCCGGGCCACCCGGC
TCCAGCATCATTTGTGGAGTCTCAGCTCCATAAATCCAGAGGGCAGGTGGGGGTGTGTCTAACTTTCCCGAGCC
TACTGTACCGAAACAGGACAGCAGAGTAGGAAGCCTCTGTGACTTCTGCTCCCTCCCTAGCTTTTCCACCAGACC
CTGCATGGTCCCACCTGGCTGTGTGAAGCAAGGATCAGGGAGCGTGGCTCTATGTGAGTCTCCAGAACCCTGTC
CACCTGGCGTGGTGGCAGACATGGCTACCTGCAGCTGAGCTGCCAGTTCTCTGAGTCTCAAAGACCAGGCCA
TTTTCTTCATGTTTACCAGCTCATGTAACTGCAGAGAGAACCAAGGGAGCCTGAGAGCTGCCTGGGGAAGACA
CCAGACGCTGGGGTGCCAGCTGGGCTCCCAACCCACCCACGCTCAAGCCAGGCTGGGGGTGGAACAGGGTGT
GTGGTTTCTGGGAGCTGGTTCTTAGATTTGGCATCTGAAGGGTATAAAGGCCTGGGGGGTGCACATCAAATGA
CCAAATCGATTTGAGGAGAGAGCCTTAAGGAAGGTTGTACCTTCTGTGCTGGATGCTCTTCAAGGACTGAAGAA
TTATTTTTCATGTTTTCTTAATCCATGGCCATGGAACAAGTAAGGCAACCCCTGGGGACTGGTTCAGCAC
ATAAAAGATGACTTTTCTAGGACACC

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FIGURE 2875

GGCTACCAGGGCATGGTGGACGGAGGCTCAAACATCGCAGAGGCCGACTGGGAGAGTGTCTCCAGCATCCTGCAA
GTGGGCGGGACGATCATTGGCAGTGC CGGTGCCAGGCCTTCGCGACGCGGGAAGGCCGCTGAAGGCTGCTTGC
AACCTGCTGCAGCGAGGCATCACCAACCTGTGTGTGATCGGCGGGGACGGGAGCCTCACCGGGGCCAACCTCTTC
CGGAAGGAGTGGAGTGGGCTGCTGGAGGAGCTGGCCAGGAACGGCCAGATCGATAAGGAGGCCGTGCAGAAGTAC
GCCTACCTCAACGTGGTGGGCATGGTGGGCTCCATCGACAATGATTTCTGCGGCACCGACATGACCATCGGCACG
GACTCCGCCCTGCACAGGATCATCGAGGTGTCGACGCCATCATGACCACGGCCAGAGCCACCAGAGGACCTTC
GTTCTGGAGGTGATGGGACGACA¹CTGTGGGTACCTGGCCCTGGTGAGTGCCTTGGCCTGCGGTGCGGACTGGGTG
TTCCTTCCAGAATCTCCACCAGAGGAAGGCTGGGAGGAGCAGATGTGTGTCAAACCTCTCGGAGAACCGTGCCCGG
AAAAAAAGGCTGAATATTATTATTGTGGCTGAAGGAGCAATTGATACCCAAAATAAACCCATCACCTCTGAGAAA
ATCAAAGAGCTTGTCTGCACGCAGCTGGGCTATGACACACGTGTGACCATCTCGGGCACGTGCAGAGAGGAGGG
ACCCCTTCGGCATTTCGACAGGATCTTGGCCAGCCGATGGGAGTGGAGGCAGTCATCGCCTTGCTAGAGGCCACC
CCGGACACCCAGCTTGCCTGCTGCTACTGAACGGGAACACGCCGTGCGCCTGCCGCTGATGGAGTGCCTGCAG
ATGACTCAGGATGTGCAGAAGGCGATGGACGAGAGGAGATTTCAAGATGCGGTTGACTCCGAGGGAGGAGCTTT
GCGGGCAACCTGAACACCTACAAGCGACTTGCCATCAAGCTGCCGATGATCAGATCCCAAAGACCAATTGCAAC
GTAGCTGTCTCAACGTGGGGGCACCCGCGGCTGGGATGAACGCAGCCGTACGCTCAGCTGTGCGCGTGGGCATT
GCCGACGGCCACAGGATGCTCGCCATCTATGATGGCTTTGACGGCTTCGCCAAGGGCCAGATCAAAGAAATCGGC
TGGACAGATGTGCGGGGCTGGACCGGCCAAGGAGGCTCCATTCTTGGGACAAAACGCGTTCTCCCGGGAAGTAC
TTGGAAGAGATCGCCACACAGATGCGCACGCACAGCATCAACGCGCTGCTGATCATCGGTGGATTTCGAGGCCTAC
CTGGGACTCCTGGAGCTGTGAGCCGCCCGGGAGAAGCACGAGGAGTTCTGTGTCCCATGGTCATGGTTCCCGCT
ACTGTGTCCAACAATGTGCCGGGTTCGATTTTCAGCATCGGGGCAGACACCGCCCTGAACACTATCACCGACACC
TGCGACCGCATCAAGCAGTCCGCCAGCGGAACCAAGCGGCGCGTGTTCATCATCGAGACCATGGGCGGCTACTGT
GGCTACCTGGCCAACATGGGGGGGCTCGCGGCCGAGCTGATGCCGCATACATTTTCGAAGAGCCCTTCGACATC
AGGGATCTGCAGTCCAACGTGGAGCACCTGACGGAGAAAATGAAGACCACCATCCAGAGAGGCCCTTGTGCTCAGA
AATGAGAGCTGCAGTGAAAACCTACACCACCGACTTCATTTACCAGCTGTATTGAGAAGAGGGCAAAGGCGTGT
GACTGCAGGAAGAACGTGCTGGGTACATGCAGCAGGTGGGGCACCCCTCTCCATTTGATAGAACTTTGGAACC
AAAATCTCTGCCAGAGCTATGGAGTGGATCACTGCAAAACTCAAGGAGGCCCGGGGCAGAGGAAAAAAATTTACC
ACCGATGATTCCATTTGTGTGCTGGGAATAAGCAAAAGAAACGTTATTTTCAACCTGTGGCAGAGCTGAAGAAG
CAAA²CGGATTTTGAGCACAGGATTCCTCAAAGAACAGTGGTGGCTCAAGCTACGGCCCCCTCATGAAAATCCTGGCC
AAGTACAAGGCCAGCTATGACGTGTGCGACTCAGGCCAGCTGGAACATGTGCAGCCCTGGAGTGTCTGACCCAGT
CCCGCTGCATGTGCCTGCAGCCACCGTGGACTGTCTGTTTTGTAACTTAAGTTATTTTATCAGCACTTTAT
GCACGTATTATTGACATTAATACCTAATCGCGAGTGCCCATCTGCCCCACCTGCTCCAGTGCGTGCTGTCTGTG
GAGTGTGTCTCATGCTTTCAGATGTGCATATGAGCAGAATTAA

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FIGURE 2876

GGGTGGGGCGTGTTGACCCCTTAAAGGCGCCAGAGCCGCGGTACGGCTCAGGTTCCCGGTGCTTCGCGCGTC
TGCCGTTGTACAGGCCAGGGAGGTGGCACCACCAGGCGAAGCTTGGCGAGATTGTGTCTCAAGCGCGTACGGG
CGCCAATTGGCCGGGCGATGTGGCGTGGACTGGCGCTGGCGCGAGCGATTGGCTGCGCGGCCCGGGGCGGGGCC
AGTGGGCGGTGCGCGCCGAGACTGTGCTCAAAGCGGGCGCCATCCGGGACCGGCGGTTGTCTGTGGCCGAGGC
TGATCAGTGTTCTAGAACAGATCAGACATTTTGTAAATGATGCCTGAAATAAACACTAACCACCTCGACAAGCAAC
AGGTTCAACTCCTGGCAGAGATGTGTATCCTTATTGATGAAAATGACAATAAAATTGGAGCTGAGACCAAGAAGA
ATTGTACCTGAACGAGAACATTGAGAAAGGATTATTGCATCGAGCTTTTAGTGTCTTCTTATTCAACACCGAAA
ATAAGCTTCTGCTACAGCAAAGATCAGATGCTAAGATTACCTTTCCAGGTTGTTTTACGAATACGTGTTGTAGTC
ATCCATTAAGCAATCCAGCCGAGCTTGAGGAAAGTGACGCCCTTGGAGTGAGGCGAGCAGCACAGAGACGGCTGA
AAGCTGAGCTAGGAATTCCCTTGGAAGAGGTTCTCCAGAAGAAATTAATTATTTAACACGAATTCACTACAAAG
CTCAGTCTGATGGTATCTGGGTGAACATGAAATTGATTACATTTTGTGGTGAGGAAGAATGTAACCTTTGAATC
CAGATCCCAATGAGATTAAAAGCTATTGTTATGTGTCAAAGGAAGAACTAAAAGAACTTCTGAAAAAGCAGCCA
GTGGTGAAATTAAGATAACGCCATGGTTTAAATTTATTCAGCGACTTTTCTCTTTAAATGGTGGGATAACTTAA
ATCATTTGAATCAGTTTGTGGACATGAGAAAATATACAGAATGTGAATATGTAGGTAAATGATTACAGAAAAAT
TTATCTGCTTAACAACTTAGAATGACTTTTCTCTTTAAATTTAGTTCTATCATTAAATTTATCATTAAATTTAG
TTCTATCATTTGGTACTATCATTAAATGTATTATATACACTGATACTTTAAACTTGTGTGGAAAAACTAACTTA
TAATTTTGTATCACACACCCTGGATATGTGTTCTGTTTCTAAGCGACATTTGTGAGAGATTATTGTAATGAGA
GCGAGCAAATAAACTTAATTTAATCTTTGCAGATACATACTTATGGGAAATTTGAACAAATGAGTGAACTCTG
TTTTTAGTAGGCTGTGATAAACATTTCCGGAGCACTTGCGAGGACTTGCTATTTGCCAGGTGCTTTATGTATCA
TTAAATTTTTCTCATAGTTTCAGAAAAATGTGCAAAGGAACTATTGTCTCGCTCCTTCAAAACAGTCTTAATTAA
CTTTTCATATTAGCAGATTAACTAGCAGAGCAGGTTCAAGGGAATTAATGATATGGACCCTAATTTGTATCAT
TCTGAGTTGATTGTGTGGTTTATTCTGTTCTGGAAACATGTTGATACTTACAGTCAGCCACTGCTTTTGATAAGTG
ATATTGATTAGGTTGAATCTTCTGTAAATAGTATTTACCAGTTAGCAAAGTCTGTGTTTTCAGAATTACAGTGA
GCACAGAGGTGTTTATAAAATGGGAATTGAGTCCCACTCGGTAAGAGTTGCTTAACTTGACACTGTTGACATTT
GGGCTGGATAAAACCCCTGTGGTGGGGTCTGTGCTGTGCATTGCAGGATGGTGAGCAGCGTCCCTCTCATGTGAC
ACCCACAGTTATGCCGGATGTTGCCAGATGCCCCTAGGGGACAGAGTCAACCCCACTGAGGACCACTGTCCTA
CAGAGTCAGGAAATATTGTAGGGAGAAAAAATAACAACAACAAAGGCCCTGTGTTAATGTTAAATAGATGAGATT
ATGGAATGTGTATATTAATGTTAAAAATTGTACCTTGATCAATGTACTTTTATAAACTTGCCATAGATATCTCA
GATTTGAAACCTCAAGACAGATTTATTATCTTAAATGCTGTATGATAATGAAGAAAAATAAAATTTATTTCTT
GCAAAGTTAAATGTTTGTAAATTCATAGAAATGACTCATTTATGGTTAACTTTGGGCAATTTATAATTTAGAC
AAGACTGTTTAGCAAGTATTTTATTGAAAAGTAAAAAAATTTGCAATTTAA

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FIGURE 2877

MMPEINTNHLDKQQVQLLAEMCILIDENDNKIGAETKKNCHLNENIEKGLLHRAFSVFLFNTENKLLLQQRSDAK
ITFPGCFNTCCSHPLSNPAELEESDALGVRRAAQRRKAE LGIPLEEV PPEEINYLTRIHYKAQSDGIWGEHEI
DYILLVRKNVTLNPD PNEIKSYCYVSKEELKELLKKAASGEIKITPWFKI IAATFLFKWWDNLNHLNQFVDHEKI
YRM

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FIGURE 2878

GGGGCTTG GTTGAACGGACTCACCAGGAAACGTGACTTTCTGTGTCGACCTCTGCTGTATCAGGATTTCGATTCTT
GGTGTTAAACAAGACAACGCTGAAGGCTCGGTGCAGCAGCCCTGCAAAGCTTTGTGTCTTAGGTTTCAGCGTGTCT
GACGTTCTCTGGGCCCTGAAGTCACTGCTGCTGGCTGGTGTGCTGGCCACTTGGTCGTGCTGGCCTGTCTCCCAC
CGGGTGGATGCCCAGCGAGCTCTGGATGCTGTGTTTTTCCAGCGCTCTTGGGAGGTGGGCTGTGCCACTGCCTGG
CCCACCTGGCCCCACCTGGCCCCACCATTACCTGAAGGGAAGCATGAACAGCCTTTGACGTGGGAGTGGCGACTGCT
GAGAGGGAAGTGTCTGTACACAAGCAATGTAGCCTTATGGGACCTGAGTGGAGCCCCAACCCACGCAGGGCGTGT
CTTCATGGCTTTTTCCTGGCCAATCTGATACCAAGATGCAGTGGCCAGAAGTACCTGCACTTCCACTCCTGTCAAG
TCTCTGCATGGCTATGGTGAGGAAGAGCTCTGCACTGGGCAAGGAAGTTGGCCGTCGAGTGAAGGAAATGGTGAT
GCTGGTGGCCCCCTTTCCGGCAGTCAAGTTCCTATCAAGGACATTCAGTTCTCGGAAAGTGGTGAAGGCACATGC
TTCCCTGCAATGGTGGCCGCTCTCTCCACTCTCTAGAAATATTAGAGGCTAGGCTGCTGCTGTATGTCAAGGCTA
GTCCCTCTTCTATGAATCCAGAATAACTCTGAAGAAGCCGAGTAACAGGCATGAAGTGAAGAGAAATCGCTGTAA
CAGGAAGACAGCAAAGCAGATGCTAATGACCACACTATTTAACGAACTGGAACCAACGAGAAAATACGGTATTAC
TGAAGACTGCACTTCCTTGAACAGAGTGCTCTTCTCAGCAAATCGGAAATGCCTACACAAATCGCTTTACAAGAA
AGACTGTTTCAAAGCAGCACCTTTCTCAATGTTCTCGTTCAGGTGACAATTCTTCTTGGTCTCAGCTCCAATTTT
ATTGTCATTTTCATCAATAAGGATACACATCTCTGCCAGGAGTTGAACCTGTTGCTTGTGCGAGGTGGTTAGTGTT
TATTCAGGCATCATTACAAAATGTCTGATCTGTTCTAGAACACTAATATTAAAGGAAAAGAGAAAG

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FIGURE 2879

CCCGCGTGCATACGGCTGCCGGC**ATGG**CACATTACAACCTTCAAGAAAATTACGGTGGTGCCGTCCGCCAAGGACT
TCATAGACCTCACGTTGTGGAAGACTCAACGAAAGACTCCAACCGTTATTCTATAAACATTACCAAATACATCGCA
TTAGACATTTTTACATGAGAAAAGTCAAATTTACTCAACAGAATTACCATGATAGACTTTCACAAATTCTAACAG
ATTTCCCCAAATTGGATGATATTCATCCGTTCTATGCTGATTTGATGAATATTCTCTACGACAAGGATCATTACA
AGTTGGCTCTGGGGCAAATAAATATTGCCAAAAATTTAGTGGACAATGTTGCTAAAGATTATGTGCGACTGATGA
AGTATGGCGACTCTCTCTACCGCTGCAAACAGCTGAAGCGTGCGGCCCTGGGACGGATGTGCACAGTGATCAAGA
GGCAGAAGCAGAGTTTGGAGTATTTGGAGCAAGTGCCTCAGCATTATCCCGTTTGCCAACCATTTGATCCGAATA
CCAGGACCTTGCTTTTGTGTGGGTACCCAAATGTTGGGAAGTCCAGCTTCATCAACAAGGTGACGAGAGCAGACG
TGGATGTCCAGCCCTATGCGTTCACAACCAAGTCTCTGTTTGTGGGCACATGGATTATAAGTATCTACGTTGGC
AGGTTGTAGACACTCCTGGGATCCTGGACCACCCTCTGGAGGATAGGAACACCATCGAGATGCAGGCCATCACTG
CCCTGGCCCCACCTCCGTTGCTGCGGTCTGTATGTGATGGATTTGTCTGAGCAGTGTTGGGCATGGGCTGAGGGAGC
AGCTAGAACTCTTCCAGAACATCAGACCTCTCTTCATCAACAAGCCTCTCATAGTTGTAGCCAACAAATGTGATG
TGAAGAGAATAGCTGAACCTTTCTGAAGATGATCAGAAAATATTTACAGATTTGCAGTCTGAAGGATTCCCTGTAA
TAGAGACCAGCACCCCTGACTGAGGAAGGTGTTATTAAAGTTAAAAAGAGGCTTGCGATAGGCTTTTGGCTCATC
GAGTGGAAACCAAATGAAGGGAATAAAGTGAATGAGGTGCTGAATAGACTGCACCTGGCTATCCCAACCAGGA
GGGACGATAAGGAGAGGCCCCCTTTCATCCCTGAAGGAGTGGTGGCTCGCAGGAAGAGGATGGAACTGAGGAGT
CCAGGAAGAAGAGGGAACGAGATCTTGAGCTGGAATGGGAGATGATTATATTTTGGATCTTCAGAAGTACTGGG
ATTTAATGAATTTGTCTGAAAAACATGATAAGATACCAGAAATCTGGGAAGGCCATAATATAGCTGATTATATTG
ATCCAGCCATCATGAAGAAATTGGAAGAATTAGAAAAAGAAGAAGAGCTGAGAACAGCTGCTGGAGAGTATGACA
GTGTATCTGAGAGTGAAGACGAAGAGATGCTGGAATCCGACAGCTGGCAAAGCAAATTCGAGAGAAAAAGAAGT
TGAAAAATCTGGAGTCCAAAGAAAAGAATACACAGGGACCCAGGATGCCGCGAACTGCTAAGAAGGTTTCAGAGGA
CAGTTTTGGAGAAGGAGATGCGTAGTCTTGGTGTGACATGGACGATAAAGACGATGCCCATACGCAGTCCAGG
CAAGAAGATCCCGGAGCATCACTAGGAAAAGAAAGCGGGAAGACTCTGCTCCCCCGTCTCTGTGGCCCGGAGTG
GGAGTTGCTCTCGAACTCCACGTGACGTTTCTGGTCTTAGGGATGTCAAGATGGTGAAGAAAGCCAAGACTATGA
TGAAGAATGCTCAGAAGAAGATGAATCGGTTGGGGAAGAAAGGGGAGGCGGATAGACACGTGTTTGATATGAAGC
CCAAGCACTTGCTGTCTGGGAAGAGGAAAGCTGGTAAAAAGGACAGGAGAT**AGT**ATCCGTTTGGTTGGCGTGGCT
TCGCTAGAGTGTTGCTGTTTTATTTCTGGTTTGGCACAGTATGGTTTCATGAAATTGGAGCTCTGTATAAACTGA
AAAAGACAAAATAAGTAAAGCACTTGTGCTTTGCTGAAAACTATGGTTAACCTATATAGGTGTGGGAAATTTT
TGTCAGTGCATAATATTACAAATATTTTGTAGTACAGTGTTCACATTTAATGGAGTATCAGTTGCTTCAGAT
TTTCAGAACTGGGAAGATTTACTGGTTTAACTAGGTTGTTTTGATGGAGAAAAACCTTATTTTCTTTTGTAAGA
GCTGGGAGCAAACACGTTTATGAGTGTGTCGGAATCCCGTGCTTAAATACGCTCTTAAATTATTTTCTAGTCTT
ATTTTACAATGTCTCATTGTAGTCTGTCTTCAACTATTTTATCCAAAATAAACCTCCAGAAGAAAGT

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FIGURE 2880

MAHYNFKKITVVPSAKDFIDLTLSTQRTPTVIHKHYQIHRIRHFYMRKVKFTQQNYHDRLSQILTDFFPKLDDI
HPFYADIMNILYDKDHYKLALGQINIAKNLVDNVAKDYVRLMKYGDSLYRCKQLKRAALGRMCTVIKRQKQSLEY
LEQVRQHLSRLPTIDPNTRTLLCGYPNVGKSSFINKVTRADVVDVQPYAFTTKSLFVGHMDYKYLRWQVVDTPGI
LDHPLEDRNTIEMQAITALAHRAAVLYVMDLSEQCGHGLREQLELFQNI RPLFINKPLIVVANKCDVKRIAELS
EDDQKIFTDLQSEGFPVIETSTLTEEGVIKVKTEACDRLLAHRVETKMKGKVNVEVLNRLHLAIPTRDDKERPP
FIPEGVVARRRKRMETESRKKRERDLELEMDDYILDQKYWDLNMLSEKHDKIPEIWEGHNIADYIDPAIMKKL
EELEKEEELRTAAGEYDSVSESEDEEMLEIRQLAKQIREKKKLKILESKEKNTQGPRMPRTAKKVQRTVLEKEMR
SLGVDMDDKDDAHYAVQARRSRISITRKRKREDSAPPSSVARSGSCSRTPRDVSGLRDVKMVKKAKTMMKNAQKKM
NRLGKKGEADRHVFDMPKHL LSGKRKAGKKDRR

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FIGURE 2881

TGCTAACCAGGCCAGTGACAGAAATGGATTGCAAATACCAGTGTGTGAAGCTGAATGATGGTCACTTCATGCCTG
TCCTGGGATTTGGCACCTATGCGCTGCAGAGGTTCTTAAAAGTAAAGCTCTAGAGGCCGTCAAATTGGCAATAG
AAGCCGGGTTCCACCATATTGATTCTGCACATGTTTACAATAATGAGGAGCAGGTTGGACTGGCCATCCGAAGCA
AGATTGCAGATGGCAGTGTGAAGAGAGAAGACATATTCTACACTTCAAAGCTTTGGAGCAATTCCTCATCGACCAG
AGTTGGTCCGACCAGCCTTGGAAGGTCACTGAAAAATCTTCAATTGGACTATGTTGACCTCTATCTTATTCATT
TTCCAGTGTCTGTAAAGCCAGGTGAGGAAGTGATCCCAAAAGATGAAAATGGAAAAATACTATTTGACACAGTGG
ATCTCTGTGCCACATGGGAGGCCATGGAGAAGTGTAAGATGCAGGATTGGCCAAGTCCATCGGGGTGTCCAACCT
TCAACCACAGGCTGCTGGAGATGATCCTCAACAAGCCAGGGCTCAAGTACAAGCCTGTCTGCAACCAGGTGGAAT
GTCATCCTTACTTCAACCAGAGAAAACCTGCTGGATTTCTGCAAGTCAAAGACATTGTTCTGGTTGCCTATAGTG
CTCTGGGATCCCATCGAGAAGAACCATGGGTGGACCCGAACCTCCCGGTGCTCTTGGAGGACCCAGTCCTTTGTG
CCTTGGCAAAAAAGCACAAGCGAACCCAGCCCTGATTGCCCTGCGCTACCAGCTGCAGCGTGGGGTTGTGGTCC
TGGCCAAGAGCTACAATGAGCAGCGCATCAGACAGAACGTGCAGGTGTTTGAATTCCAGTTGACTTCAGAGGAGA
TGAAAGCCATAGATGGCCTAAACAGAAATGTGCGATATTTGACCCTTGATATTTTTGCTGGCCCCCTAATTATC
CATTTTCTGATGAATATTAACATGGAGGGCATTGCATGAGGTCTGCCAGAAGGCCCTGCGTGTGGATGGTGACAC
AGAGGATGGCTCTATGCTGGTGAATGGACACATCGCCTCTGGTTAAATCTCTCCTGCTTGGTGATTTTCAGCAAGC
TACAGCAAAGCCCATTGGCCAGAAAGGAAAGACAATAATTTGTTTTTTCATTTTGAAAAATTAAATGCTCTCT
CCTAAAGATTCTTCACCT

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FIGURE 2882

MDSKYQCVKLNDGHFMPVLGFGTYAPAEVPSKSKALEAVKLAIEAGFHHIDSAHVYNNEEQVGLAIRSKIADGSVK
REDIFYTSKLWSNSHRPELVRPALERSLKNLQLDYVDLYLIHFPVSVKPGEEVIPKDENGKILFDTVDLCATWEA
MEKCKDAGLAKSIGVSNFNHRLLEMILNKPGLKYKPVCNQVECHPYFNQRKLLDFCKSKDIVLVAYSALGSHREE
PWVDPNSPVLLEDPVLCALAKKHKRTPALIALRYQLQRGVVVLAKSYNEQRI RQNVQVFEFQLTSEEMKAIDGLN
RNVRYLTLDIFAGPPNYPFSDY

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FIGURE 2883

CTCTGAGGAGAAGCAGCAGCAAACATTTGCTAGTCAGACAAGTGACAGGGAATGGATTCCAAACAGCAGTGTGTA
AAGCTAAATGATGGCCACTTCATGCCGTGATTGGGATTITGGCACCTATGCACCTCCAGAGGTTCCGAGAAGTAAA
GCTTTGGAGGTCACAAAATTAGCAATAGAAGCTGGGTTCGCCATATAGATTCTGCTCATTATACATAATGAG
GAGCAGGTTGGACTGGCCATCCGAAGCAAGATTGCAGATGGCAGTGTGAAGAGAGAAGACATATTCTACACTTCA
AAGCTTTGGTCCACTTTTCATCGACCAGAGTTGGTCCGACCAGCCTTGGAAAACTCACTGAAAAAAGCTCAATTG
GACTATGTTGACCTCTATCTTATTCATTCTCCAATGTCTCTAAAGCCAGGTGAGGAACCTTTCACCAACAGATGAA
AATGGAAAAGTAATATTTGACATAGTGGATCTCTGTACCACCTGGGAGGCCATGGAGAAGTGTAAAGGATGCAGGA
TTGGCCAAGTCCATTGGGGTGTCAAACCTTCAACCGCAGGCAGCTGGAGATGATCCTCAACAAGCCAGGACTCAAG
TACAAGCCTGTCTGCAACCAGGTAGAATGTCATCCGTATTTCAACCGGAGTAAATTGCTAGATTTCTGCAAGTCG
AAAGATATTGTTCTGGTTGCCTATAGTGCTCTGGGATCTCAACGAGACAAACGATGGGTGGACCCGAACCTCCCCG
GTGCTCTTGGAGGACCCAGTCCTTTGTGCCTTGGCAAAAAAGCACAAGCGAACCCAGCCCTGATTGCCCTGCGC
TACCAGCTGCAGCGTGGGGTTGTGGTCTGGCCAAGAGCTACAATGAGCAGCGCATCAGACAGAACGTGCAGGTT
TTTGAGTTCCAGTTGACTGCAGAGGACATGAAAGCCATAGATGGCCTAGACAGAAATCTCCACTATTTTAAACAGT
GATAGTTTTGCTAGCCACCCTAATTATCCATATTCAGATGAATATTAACATGGAGAGCTTTGCCTGATGTCTACC
AGAAGCCCTGTGTGTGGATGGTGACGCAGAGGACGTCTCTATGCCGGTGACTGGACATATCACCTCTACTTAAAT
CCGTCTGTTTAGCGACTTCAGTCAACTACAGCTGAGTCCATAGGCCAGAAAGACAATAAATTTTTATCATTTTG
AAAT

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FIGURE 2884

MSKQQCVKLNDGHFMPVLGFGTYAPPEVPRSKALEVTKLAIEAGFRHIDSAHLYNNEEQVGLAIRSKIADGSVK
REDIFYTSKLWSTFHRPELVRPALENSLKKALDYVDLYLIHSPMSLKPGEELSPTDENGKVIFDIVDLCTTWEA
MEKCKDAGLAKSIGVSNFNRRQLEMILNKPGLKYKPVCNQVECHPYFNRSKLLDFCKSKDIVLVAYSALGSQRDK
RWVDPNSPVLLEDPVLCALAKKHKRTPALIALRYQLQRGVVVLAKSYNEQRIRQNVQVFEFQLTAEDMKAIDGLD
RNLHYFNSDSFASHPNYPYSDEY

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FIGURE 2885

ATGGATCCCAAATATCAGTGTGTGGAGCTAAATGATGGTCATTTCATGCCTGTATTAGGATTGGCACCTGTGTA
CCTCCAGAGGTGATTGACTGCAGTGGAAATGGTTTCTCCGTTTCTTCTATAATTGAAGAAATTGTTTGTCTTCC
AAGAATAGAGTTGTGGAGGTTACAAAATTAGCAATAGAAGCTGGTTCTTCCATATTGATTCTGCTCATTATAC
AATAATGAGGAGCAGGTGGAATGTCATCCTTACCTCAACCAGAGCAAACCTGCTGGATTCTGCAAGTCAAAGAC
ATTGTTCTGGTTGCCCACACCCTGATTGCTCTGTGCTACCAGCTGCAGCGTGGGGCTGTGGTCCTGGTCAAGAGC
TCCAATGAACAGCAGATCAGAGAGAACATGCAGGTTTTTGACTTTGAGTTGACTCCAGAGGACATGAAAGCCATT
GACAGCCTCAACGGAAATCTCCGACATGCTAAGTTACAATTTTAA

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FIGURE 2886

MDPKYQCVELNDGHFMPVLGFGTCVPPEVIDCSGMVSPFLSIIIEEIVCSSKNRVVEVTKLAIEAGFFHIDSAHLY
NNEEQVECHPYLNQSKLLDFCKSKDIVLVAHTLIALCYQLQRGAVVLVKSSNEQQIRENMQVDFELTPEDMKAI
DSLNGNLRHAKLQF

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FIGURE 2887

CATTTTCACTGCGTTCAAGTATGCTTTTATGAGCTGGTGGTGCCATAGTTTTAGATTCCCTGTATCGAAAAGCTA
CAATTACATAAGGAAGATCTGTCTGGGTCGTTCAATAACGGTGTTGCCTGAAAGTTCGTAAAAGTAATACTTAA
TTATATTAAAAATTACAACATAACCAGATTTCCCATGATACCATGGTCTTGAATGAAGACAGTCGGAGTATTTGG
AAATGTATACACCTCTTTGGCTGGATCACCCAGAGTGGTAACAGCACTGCTGCCAACACGGAGTCCACACTGACA
TACCAATTTTACCTGCTTTTTCAGTATCAAACAGAAGAAACCCGTAAGTGTCTTGAAGTTCTTCCTGAGTATAACT
ACTTGCTTTTTTTTTGTTGGTAAAAAGTTTTGTATCTTTTCTGATAGGGACCCTGTCTCGATCTTCTCTAAGAGAG
AATGTAGCTGGGAGGGTGGTCTTAATTCATTTTACCAAGTATACCCTCAGAATTCTTTGACCATAGTCCTGTTCTC
TGTTAATGTCATAAATGCCGTCCTTGGCGTGGCCGCCGCCCCGAGGACCTGAGATCCCGGCTCGGCCTCCTTCC
CATGCTTCTCCCGGCCGTGCTCTGCGTCCTCCCGGGCCCTCGCGACACCGGCGCACGTGGGAAGCACCAGTCGCC
GGCTCCGCGCTCCCGCGGGGACCCCCCTCAGGGGCACGCCGTCCGCCCCAGCCCCGGGGTCTCGCCGCGGGCGC
TGACAGGGACGCCGCGGCCG

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FIGURE 2888

MVLNEDSRSIWKCIHLFGWITQSGNSTAANTESTLTYQFYLLFSIKQKPVSVLKFFLSITTCFFLLVKSFVSFL
IGTLRSSSLRENVAGRVVLIHFHQVYPQNS

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FIGURE 2889

CAATGCTACATTAAACCCATTATGTAAGACCAATAAATGCAGAGCCAGTGTTTCAAGCACAGGAAATACCAGCAGG
CAGAATGCCAGTTTGCTTAAGAATGGTGAGCCTGAAGCTGAGTTACATAAAGAAACCACAGGTCCAGGCCACTGC
TGGCCCTCAGTCCAACACCACATCTTCTCTAAAAGGTGAACGCAAAGCCATCCACACGCTGCAAGATGTGTCAAC
ATGTGAAACAAAGGAGCTATTGAATGTCGGGGTTTCTCCCTTTGTGCTGGTCCCTACCAAATACAGCAGACAC
CAAGGAAAACCTCAGTAAAGAGCCTTTGGCCTCCTTTGTTTCAGAATCCTTTGATACTTCTGTTTGTGGAATAGC
CACAGAGCACGTAGAAATTGAGAACAGTGGGGAGGGGCTCAGGGCTGAGGCTGGTTCTGAAACCCTAGGCAGAGA
TGGAGAGGTGGTGTGAATTCCGACATGCACTATGAACTCTCTGGAGATTCTGATCTAGACCTGCTTGGTGATTG
TAGAAATCCCAGACTGGATTGGAGGATTCTTATACTTTAAGAGGTAGTTACACCAGGAAAAAAGATGTTCCAC
AGATGGCTATGAGTCGTCGTTGAACTTCCACAACAACAACCAAGAGGACTGGGGCTGCTCTAGCTGGGTTCCAGG
CATGGAGACGAGCCTCCCTCCCGGGCACTGGACTGCTGCGGTAAAGAAAGAAGAGAAGTGTGTGCCGCTTACGT
CCAAATCCGAGATCTCCACGGGATCCTCAGGACTTACGCCAATTCTCTATAACAAAAGAACTCAAAGATACCAT
GAGAACTTCACACGGCCTGAGGAGGCACCCGAGTTTCAGTGCAAATGTGGCCTGCCAGCTCCTGGACAAGCAC
TTGGCAGGTGGCAGACGACCTCACCAGAACACTTTAGACCTGGAGTATCTGCGTTTTGCACATAAACTAAAAACA
GACCATAAAGAATGGGGATTCTCAGCATTCTGCCTCCTCTGCCAATGTCTTTCCAAAGGAGTCACCAACCCAGAT
CTCCATTGGTGCTTTCCCTTCGACAAAAATCTCTGAGGCCCAATTTCTGCATCCTGCACCTAGGAGCAGAAGCCC
CCTTCTGGTAACAGTTGTGGAGTCAGATCCCAGACCACAGGGGACGCCAGGAGAGGCTACACAGCCAGCAGTCT
GGACAGCTCTTCTCTTGGAGAGAGAGATGTAGTCATAATAGAGATCTTAGAAATTCTCAAAGAAATCACACTGT
TTCATTCCACCTCAACAACTGAAATACAACAGTACTGTGAAGGAATCTCGGAATGATATTTCACTTATTCTCAA
TGAGTATGCTGAATTCAACAAGGTGATGAAGAATAGCAACCAATTCATTTTCCAAGACAAAAGAGCTAAATGATGT
TTCTGGAGAAGCCACTGCTCAAGAGATGTATCTGCCTTTCCCAGGACGGTCAGCCTCCTATGAAGACATAATCAT
AGACGTGTGCACCAATTTGCACGTCAAATAAGAAGTGTGTGAAAGAGGCTTGTAAGAGTACCTTCCTGTTCTA
CCTTGTGCAAAACAGAAGACAAATCATTCTTTGTAAGAACAAGAACCTTCTGAGGAAAGGAGGCCATACAGAAAT
TGAACCTCAGCACTTCTGTCAAGCTTTCCACAGAGAGAATGATACACTAATCATCATCAGAAATGAAGATAT
ATCATCACATTTGCATCAGATTCTTCTTTGCTGAAGCTGAAGCATTTCCTCCAGTGTCATCTTTGCTGGAGTAGA
CAGCCCTGGAGATGTTCTTGATCACACCTACCAAGAAGTGTTCGTGCAGGAGGCTTTGTGATATCAGATGACAA
GATACTAGAAGCTGTAACATTAGTTCAACTGAAGGAAATTATCAAAATCCTGGAAAACTAAATGGAAATGGAAG
ATGGAAGTGGTTGCTTCACTACAGGGAAAATAAAAAGCTAAAAGAAGATGAAAGAGTGGATTCAACTGCACATAA
GAAGAACATAATGTTGAAGTCATTTAGAGTGCAATATCATTGAATTGCTTCATTATCACCAGTGTGACTCTCG
ATCATCAACAAAAGCAGAAATCTGAAATGTTTGCTAAACCTGCAAATTCAGCATATTGATGCCAGGTTTGCTGT
CCTCCTAACAGACAAGCCTACTATCCCCAGAGAAGTCTTTGAAAATAGTGGAAATCCTTGTTACAGATGTAATAA
CTTTATAGAAAACATAGAAAAAATAGCAGCTCCATTTAGGAGTAGCTATTGGTGACTCAACTACAGCCTGCCTGG
ATATGGATGATGCCAATAAAAAATTAGTATTTTCCCTTTGGAAAACCTGTGAACATGTGAATACACATGTGAACA
GTCTTACATTTGAAAAACCAATGTTCTACAACCTTGAAAGTTTTCATTTTTTATATTTTGTGAAATATGTCACA
GTGGCATTGCAGTTGTCTGTTAGCTTTGGGTGTCAGTGCTAGATATTGTTTTAAATTATTTTCATTTTAAACAAG
ATGCTTTCTAAGCTATTGAGCTTATTAATAAATAATTTTACATGTTTACTTAGTTGGAGCAAAAATAAGTCTATTT
TAACAAATAGCTTTGTTTTTGCATGCTAATGTCAGAAAGGCATACGATGCACATTATGCTCTGTTTTAAAGGTTT
TACCACCTTGTAAAAACTATAATCTTAAATGGTTTTATTTGCTGTTACACAAACAACACTACATAAAACATTTT
TTCTTAAATGGTACAAATTTATAAACTATCATTTTTCACTTACGGTATTTGTAAATACTACACTACAAAAATCAG
CTTTCTGAGAAAGAAATAATCATTTATTTATGATATTGAAAATTTCTACAGTAAACACTCAAAACCAAGCAAAAA
ACATTTGTAAAGATACACGGTATCTATTTGGAGCAACGGTTTTTGTAACTAATGTGTTTCATTTTTTAAATAAAGA
CAACTAAAAATAA

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FIGURE 2890

MASLLKNGEPEAELHKETTGPGTAGPQSNTTSSLKGERKAIHTLQDVSTCETKELNVGVSSLCAGPYQNTADTK
ENLSKEPLASFVSESFDTSVCGIATEHVEIENSGEGLRAEAGSETLGRDGEVGVNSDMHYELSGDSDDLGLGDCR
NPRLDLEDSTYTLRGSYTRKKDVPTDGYESSLNFHNNNQEDWGCSSWVPGMETSLPPGHWTAAVKKEKCVPPYVQ
IRDLHGILRTYANFSITKELKDTMRTSHGLRRHPSFSANCGLPSSWTSTWQVADDLTQNTLDLEYLRFAHKLKQT
IKNGDSQHSASSANVFPKESPTQISIGAFPSTKISEAPFLHPAPRSRSPLLVTVVEDPRPQQQPRRGYTASSLD
SSSSWRERC SHNRDLRNSQRNHTVSFHLNKLKYNSTVKESRNDISLILNEYAEFNKVMKNSNQFIFQDKELNDVS
GEATAQEMYLPFPGRSASYEDIIIDVCTNLHVKLRSVVKEACKSTFLFYLVETEDKSFFVRTKNLLRKGGHTEIE
PQHFCQAFHRENDTLIIIRNEDISSHLHQIPSLKLLKHFPSPVIFAGVDS PGDVL DHTYQELFRAGGFVISDDKI
LEAVTLVQLKEIIKILEKLNGNGRWKLLHYRENKKLKEDERVDSTAHKKNIMLKSFSQSANIELLHYHQDSRS
STKAEILKCLLNLIQHIDARFAVLLTDKPTIPREVFENSGILVTDVNNFIENIEKIAAPFRSSYW

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FIGURE 2891

GGCGGTTCGGTCTCGCCTTGTGCGCCAGCTCCATTTTCCTCTCTTTCTCTTCCCCTTTCTTCGCGCCCAAGAGCGC
CTCCCAGCCTCGTAGGGTGGTCACGGAGCCCTGCGCCTTTTCCTTGCTCGGGTCCTGCGTCCGCGCCTGCCCGG
CCATGAATGAGGAGTACGACGTGATCGTGCTGGGCACCGGCCTGACGGAATGTATCCTGTGAGGTATAATGTCAG
TGAATGGCAAGAAAGTTCTTCATATGGATCGAAACCCCTTACTACGGAGGAGAAAGTGCATCTATAACACCATTGG
AAGATTTATACAAAAGATTTAAATACCAGGATCACCACCCGAGTCAATGGGGAGAGGAAGAGACTGGAATGTTG
ACTTGATTCCCAAGTTCCTTATGGCTAATGGTCAGCTGGTTAAGATGCTGCTTTATACAGAGGTAACCTCGCTATC
TGGATTTTAAAGTGACTGAAGGGAGCTTTGTCTATAAGGGTGGAAAAATCTACAAGGTTCCCTTCCACTGAAGCAG
AAGCCCTGGCATCTAGCCTAATGGGATTGTTTGAAAAACGTCGCTTCAGGAAATTCCTAGTGTATGTTGCCAACT
TCGATGAAAAAGATCCAAGAACTTTTGAAGGCATTGATCCTAAGAAGACCACAATGCGAGATGTGTATAAGAAAT
TTGATTTGGGTCAAGACGTTATAGATTTTACTGGTCATGCTCTTGCACTTTACAGAAGTATGATTACTTAGATC
AACCCTGTTATGAAACCATTAAATAGAATTAACTTTACAGTGAATCTTTGGCAAGATATGGCAAAAGCCCATAACC
TTTATCCACTCTATGGCCTTGGAGAACTGCCCAAGGATTTGCAAGGCTAAGTGCTATTTATGGAGGTACCTATA
TGCTGAATAAACCCATTGAAGAAATCATTGTACAGAATGGAAAAGTAATTGGTGTAAATCTGAAGGAGAAATTG
CTCGCTGTAAGCAGCTCATCTGTGACCCAGCTACGTAAAAGATCGGGTAGAAAAAGTGGGCCAGGTGATCAGAG
TTATTTGCATCCTCAGCCACCCCATCAAGAACACCAATGATGCCAACTCCTGCCAGATCATTATCCACAGAACC
AAGTCAATCGAAAGTCAGATATCTACGTCTGCATGATCTCCTTTGCGCACAATGTAGCAGCACAAGGGAAGTACA
TTGCTATAGTTAGTACAACCTGTGGAAACCAAGGAGCCTGAGAAGGAAATCAGACCAGCTTTGGAGCTCTTGGAAC
CAATTGAACAGAAATTTGTTAGCATCAGTGACCTCCTGGTACCAAAGACTTGGGAACAGAAAGCCAGATCTTTA
TTCCCGCACATATGATGCCACCACTCATTTTGAGACAACGTGTGATGACATTAAAAACATCTATAAGAGGATGA
CAGGATCAGAGTTTGACTTTGAGGAAATGAAGCGCAAGAAGAATGACATCTATGGGGAAGACTAACAGCAGTACA
TGTTATTATGTAATTAGGACACATTTAAATTTGGCAAATAATGCATATAATGAAATCAATATTGTAAGGCCTGC
TTTTGTAATGAAATGGAGAGAATGAAGAGCGCTGTGCCAGTAAATACTCCCCTTCACCTTTCTAATTATTAAC
TGTTTTCATGGAGTGGCTATTGAGCATTGGCAGTTACCACATTCTGTTCAATTTAACCAAACCTGGCTTTTTTTTT
TTTCTAGTGAAGTTAAACAAACATTGGGATACCGACACAGACAACCTTGAGACAGTTTTTTTTAATCTTTAATCAG
TGTAGCTATGTGCTGCTGCTCAAGAGCTGGATCCATACAGGTTGTGTGTCTGTCCTCTTGAGGTTTCAGG
AGATTCTAAATTGAATATTCCACGGTTTTGGGACAGCATCCGGAAGTTTTCCCTATGACTTTATATTTGTATTAT
GTCAAATGTTATGGCAGGGCCCAATAGCATAGCCACAAGTTTGGTTTTATGTGGGCATAAAATCTAACCAAACC
CCAGACATAGGGAGTCATTTGGAGAAAGCCTGTATGTGGTGTTTTAAACCTAATAAAGTTGATGAGAGAGAAGGGG
AGAGGAAGCGAACATAAAGCGGGTCAAGTGTAGTGCATCTTTTGTATCTCAGGCGTGGCTTCTTCAGTGGACCAA
GCTGCAATGCAGTATTGACTTGACAGAGCCTCTACTTCTGTCTCAAATGGCTCCAAATGATTTCTGTACTGCAA
AATAAAGCCAAATTCTGGAACTA

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FIGURE 2892

MNEEYDVIVLGTGLTECILSGIMSVNGKKVLHMDRNPYYGGESASITPLEDLKYRKFIPGSPPEMGRGRDWNVD
LIPKFLMANGQLVKMLLYTEVTRYLDFKVTEGSFVYKGGKIYKVPSTEAEALASSLMGLFEKRRFRKFLVYVANF
DEKDPRTFEGIDPKKTTMRDVYKKFDLGQDVIDFTGHALALYRTDDYLDQPCYETINRIKLYSESLARYGKSPYL
YPLYGLGELPQGFARLSAIYGGTYMLNKP IEEIIVQNGKVIGVKSEGEIARCKQLICDPSYVKDRVEKVGQVIRV
ICILSHPIKNTNDANSCQIIIPQNQVNRKSDIYVCMISFAHNVAAGKYIAIVSTTVETKEPEKEIRPALELLEP
IEQKFVSISDLLVPKDLGTESQIFISRTYDATTHFETTCDIKNIYKRMTGSEFD FEEMKRKKNDIYGED

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FIGURE 2893

GGCACGAGGGACTCAGCGAAGGGTGGGCGCCGCCGAGGCCTCCTGCCGCTGGCGGGTTTCGCGGAGTGCCGCCCG
GGCTCCGCTCTGCCCGCGCGGGCTCATGGGCAGAGTCGGCCGGGCGGGCCGGCATTAAACTGAAGAAAAGATG

TCCCTGTACGATGACCTAGGAGTGGAGACCACTGACTCAAAAACAGAAGGCTGGTCCAAAACTTCAAACCTTCTG
CAGTCTCAGCTTCAGGTGAAGAAGGCAGCTCTCACTCAGGCAAAGAGCCAAAGGACGAAACAAAGTACAGTCCTC
GCCCCAGTCATTGACCTGAAGCGAGGTGGCTCCTCAGATGACCGGCAAATTGTGGACACTCCACCGCATGTAGCA
GCTGGGCTGAAGGATCCTGTTCCAGTGGGTTTTCTGCAGGGGAAGTTCTGATTCCCTTAGCTGACGAATATGAC
CCTATGTTTCCTAATGATTATGAGAAAGTAGTGAAGCGCCAAAGAGAGGAACGACAGAGACAGCGGGAGCTGGAA
AGACAAAAGGAAATAGAAGAAAGGGAAAAAAGGCGTAAAGACAGACATGAAGCAAGTGGGTTTGCAAGGAGACCA
GATCCAGATTCTGATGAAGATGAAGATTATGAGCGAGAGAGGAGGAAAAGAAGTATGGGCGGAGCTGCCATTGCC
CCACCCACTTCTCTGGTAGAGAAAGACAAAGAGTTACCCCGAGATTTTCTTATGAAGAGGACTCAAGACCTCGA
TCACAGTCTTCAAAGCAGCCATTCTCCCCCAGTGTACGAGGAACAAGACAGACCGAGATCTCCAACCGGACCT
AGCAACTCCTTCTCGCTAACATGGGGGGCACGGTGGCGCACAAGATCATGCAGAAGTACGGCTTCCGGGAGGGC
CAGGGTCTGGGAAGCATGAGCAGGGCCTGAGCACTGCCTTGTCAGTGGAGAAGACCAGCAAGCGTGGCGGCAAG
ATCATCGTGGGCGACGCCACAGAGAAAGATGCATCCAAGAAGTCAGATTCAAATCCGCTGACTGAAATACTTAAG
TGTCTACTAAAGTGGTCTTACTAAGGAACATGGTTGGTGCGGGAGAGGTGGATGAAGACTTGGAAGTTGAAACC
AAGGAAGAATGTGAAAAATATGGCAAAGTTGGAAGTGTGTGATATTTGAAATTCCTGGTGCCCTGATGATGAA
GCAGTACGGATATTTTGAATTTGAGAGAGTTGAATCAGCAATTAAAGCGGTTGTTGACTTGAATGGGAGGTAT
TTTGGTGGACGGGTGGTAAAAGCATGTTTCTACAATTTGGACAAATTCAGGGTCTTGGATTTGGCAGAACAAGTT
TGATTTTAAGAACTAGAGCACGAGTCATCTCCGGTGATCCTTAAATGAACTGCAGGCTGAGAAAAGAAGGAAAAA
GGTCACAGCCTCCATGGCTGTTGCATACCAAGACTCTTGAAGGACTTCTAAGATATATGTTGATTGATCCCTTT
TTTATTTTGTGGTTTTTTAATATAGTATAAAAAATCCTTTTAAAAAACAACAAAAA

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FIGURE 2894

MSLYDDLGVETSDSKTEGWSKNFKLLQSQLQVKKAAALQAKSQRTKQSTVLAPVIDLKRGGSDDRQIVDTPPHV
AAGLKDPVPSGFSAGEVLIPLADEYDPMFPNDYEKVVKRQREERQRQRELERQKEIEEREKRRKDRHEASGFARR
PDPDSDEDEDYERERRKRSMGGAAIAPPTSLVEKDKELPRDFPYEEDSRPRSQSSKAAIPPPVYEEQDRPRSPTG
PSNSFLANMGGTVAHKIMQKYGFREGQGLGKHEQGLSTALSVEKTSKRGGKIIVGDATEKDASKKSDSNPLTEIL
KCPTKVVLRLNMVGAGEVDEDLEVETKEECEKYGKVGKCVIFEIPGAPDDEAVRIFLEFERVESAIKAVVDLNGR
YFGGRVVKACFYNLDKFRVLDLAEQV

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FIGURE 2895

CTGACCGACCTTCAGCAGGGCTGTGGCTACCAATGTTCTCTCGCGCGGGTGTGCTGGGCTGTCGGCCTGGACCTT
GCAGCCGCAATGGATTCAAGTTCGAAATATGGCAACTTTGAAAGATATCACCAGGAGACTAAAGTCCATCAAAAA
CATCCAGAAAATTACCAAGTCTATGAAAATGGTAGCGGCAGCAAAATATGCCCGAGCTGAGAGAGAGCTGAAACC
AGCTCGAATATATGGATTGGGATCTTTAGCTCTGTATGAAAAAGCTGATATCAAGGGGCTGAAGACAAGAAGAA
ACACCTCCTTATTGGTGTGTCTCAGATCGAGGACTGTGTGGTGTCTATTTCCTCCATTGCTAAACAGATGAA
AAGCGAGGTTGCTACACTAACAGCAGCTGGGAAAGAAGTTATGCTTGTTGGAATTGGTGACAAAATCAGAGGCAT
ACTTTATAGGACTCATTCTGACCAGTTTCTGGTGGCATTCAAAGAAGTGGGAAGAAAGCCCCCACTTTTGGAGA
TGCGTCAGTCATTGCCCTTGAATTACTAAATTCTGGATATGAATTTGATGAAGGCTCCATCATCTTTAATAAATT
CAGGTCTGTCATCTCCTATAAGACAGAAGAAAAGCCCATCTTTCCCTTAATACCGTTGCAAGTGCTGACAGCAT
GAGTATCTATGACGATATTGATGCTGACGTGCTGCAAATTACCAAGAATACAATCTGGCCAACATCATCTACTA
CTCTCTGAAGGAGTCCACCACTAGTGAGCAGAGTGCCAGGATGACAGCCATGGACAATGCCAGCAAGAATGCTTC
TGAGATGATTGACAAATTGACATTGACATTCAACCGTACCCGCCAAGCTGTCATCACAAAAGAGTTGATTGAAAT
TATCTCTGGTGTGTCAGCTCTGTAAAGAAGGAAAATTCAGCCAGTTGATTTTGTGTTTTAGCTTACTGCTGCCTTT
GTCCGAAGAACTGTTCTCCATTATTTGAATTACTGAAGACAGCAAGATATTTGTAAATTATCTTAAATAAAC
AACTTAAATAAAATCATTGTTTTTCTT

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FIGURE 2896

MF SRAGVAGLSAWTLQPQWIQVRNMATLKDITRRLKSIKNIQKITKSMKMVAAAKYARAERELKPARIYGLGSLA
LYEKADIKGPEDKKKHLIGVSSDRGLCGAIHSSIAKQMKSEVATLTAAGKEVMLVGIGDKIRGILYRTHSDQFL
VAFKEVGRKPPTFGDASVIALELLNSGYEFDEGSIIFNKFRSVISYKTEEKPIFSLNTVASADSMSIYDDIDADV
LQNYQEYNLANIIYYSLKESTTSEQSARMTAMDNASKNASEMIDKLTLTFNRTRQAVITKELIEIISGAAAL

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FIGURE 2897

TCCCAGCCTTCCCATCCCCCACCAGAAAGCAAATCATTCAACGACCCCCGACCCTCCGACGGCAGGAGCCCCCGG
ACCTCCCAGGCGGACCGCCCTCCCTCCCCGCGCGCGGGTTCCGGGCCCGGCGAGAGGGCGCGAGCACAGCCGAGG
CCATGGAGGTGACGGCGGACCAGCCGCGCTGGGTGAGCCACCACCACCCCGCCGTGCTCAACGGGCAGCACCCGG
ACACGCACCACCCGGGCTCAGCCACTCCTACATGGACGCGGCGCAGTACCCGCTGCCGGAGGAGGTGGATGTGC
TTTTTAACATCGACGGTCAAGGCAACCACGTCCCGCCCTACTACGGAACTCGGTGAGGGCCACGGTGCAGAGGT
ACCCTCCGACCCACCACGGGAGCCAGGTGTGCCGCCCGCCTCTGCTTCATGGATCCCTACCCTGGCTGGACGGCG
GCAAAGCCCTGGGCAGCCACCACACCGCCTCCCCCTGGAATCTCAGCCCTTCTCCAAGACGTCCATCCACCACG
GCTCCCCGGGGCCCCCTCTCCGTCTACCCCCGGCCTCGTCTCTCCTTGTGCGGGGGGCCACGCCAGCCCGCACC
TCTTCACCTTCCCGCCCCACCCCGCCGAAGGACGTCTCCCGGACCCATCGCTGTCCACCCAGGCTCGGCCGGCT
CGGCCCCGGCAGGACGAGAAAGAGTGCCTCAAGTACCAGGTGCCCTGCCGACAGCATGAAGCTGGAGTCTGTCC
ACTCCCGTGGCAGCATGACCGCCCTGGGTGGAGCCTCCTCGTCGACCCACCACCCCATCACCACCTACCCGCCCT
ACGTGCCCCGAGTACAGCTCCGGACTCTTCCCCCCCAGCAGCCTGCTGGGCGGCTCCCCACCGGCTTCGGATGCA
AGTCCAGGCCCCAAGGCCCGGTCCAGCACAGGCAGGGAGTGTGTGAACGTGTGGGGCAACCTCGACCCCACTGTGGC
GGCGAGATGGCACGGGACACTACCTGTGCAACGCCTGCGGGCTCTATCACAAAATGAACGGACAGAACCGGCCCC
TCATTAAGCCCAAGCGAAGGCTGTCTGCAGCCAGGAGAGCAGGGACGTCTGTGCGAACTGTGAGACCACCAAA
CCACACTCTGGAGGAGGAATGCCAATGGGGACCCTGTCTGCAATGCCTGTGGGCTCTACTACAAGCTTCACAAAT
TTAACAGACCCCTGACTATGAAGAAGGAAGGCATCCAGACCAGAAACCGAAAAATGTCTAGCAAATCCAAAAAGT
GCAAAAAAGTGCATGACTCACTGGAGGACTTCCCCAAGAACAGCTCGTTTAACCCGGCCGCCCTCTCCAGACACA
TGTCTCCTCCCTGAGCCACATCTCGCCCTTCAGCCACTCCAGCCACATGCTGACCACGCCCACGCCGATGCACCCGC
CATCCAGCCTGTCTTTTGGACCACACCACCCCTCCAGCATGGTCACCGCCATGGGTTAGAGCCCTGCTCGATGCT
CACAGGGCCCCCAGCGAGAGTCCCTGCAGTCCCTTTCGACTTGCATTTTGCAGGAGCAGTATCATGAAGCCTAA
ACGCGATGGATATATGTTTTTGAAGGCAGAAAGCAAATTATGTTTGCCACTTTGCAAAGGAGCTCACTGTGGTG
TCTGTGTTCCAACCACTGAATCTGGACCCCATCTGTGAATAAGCCATTCTGACTCATATCCCTATTTAACAGGG
TCTCTAGTGTGTGAAAAAAAAAATGCTGAACATTGCATATACTTATATTGTAAGAAATACTGTACAATGACTT
TATTGCATCTGGGTAGCTGTAAGGCATGAAGGATGCCAAGAAGTTTAAGGAATATGGGAGAAATAGTGTGGAAAT
TAAGAAGAACTAGGTCTGATATTCAAATGGACAACTGCCAGTTTTGTTTCCTTCACTGGCCACAGTTGTTTG
ATGCATTAAAAGAAAATAAAAAAAGAAAAAGAGAAAAGAAAAAAGAAAAAAGTTGTAGGCGAATCATTTG
TTCAAAGCTGTTGGCCTCTGCAAAGGAAATACCAGTTCTGGGCAATCAGTGTTACCGTTACACAGTTGCCGTTGA
GGGTTTCAGAGAGCCTTTTTCTAGGCCTACATGCTTTGTGAACAAGTCCCTGTAATTGTTGTTGTATGTATAAT
TCAAAGCACAAAATAAGAAAAGATGTAGATTTATTTATCATATTATACAGACCGAACTGTTGTATAAAATTTAT
TTACTGCTAGTCTTAAGAACTGCTTTCTTTCTGTTTGTGTTTCAATATTTTCCTTCTCTCAATTTTGGTTG
AATAAACTAGATTACATTCAGTTGGC

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FIGURE 2898

TGGCACCGGCATCGGCTGACACTGCTGCCTCCAGCTAGTTATTTTCGTCCTCTTCCGTTCTTCACCCCTACACCTT
GGAGGTGAACCTTCTCACCTGAGGGCTGTAAAGACTCGTTTGAAAATGGAGAGCCAAGAACCAACGGAATCTTCTC
AGAATGGCAAACAGTATATCATTTCAGAGGAGTTAATTTCAGAAGGAAAATGGGTCAAGCTTGAAAAACAACGT
ACATGGATCCTACTGGTAAACTAGAACTTGGGAATCAGTGAAACGTACAACCAGGAAAGAGCAGACTGCGGATG
GTGTCGCGGTCTATCCCGTGCTGCAGAGAACACTTCACTATGAGTGTATCGTTCTGGTGAAACAGTTCCGACCAC
CAATGGGGGGCTACTGCATAGAGTTCCCTGCAGGTCTCATAGATGATGGTGAAACCCCAAGCAGCTGCTCTCC
GGGAGCTTGAAGAAGAACTGGCTACAAAGGGGACATTGCCGAATGTTCTCCAGCGGTCTGTATGGACCCAGGCT
TGTCAAACTGTACTATACACATCGTGACAGTCACCATTAACGGAGATGATGCCGAAAACGCAAGGCCGAAAGCCAA
AGCCAGXXXXXXXXXAGTTTGTGGAAGTCATTTCTTTACCCAAGAATGACCTGCTGCAGAGACTTGATGCTCTGG
TAGCTGAAGAACATCTCACAGTGGACGCCAGGGTCTATTCTACGCTCTAGCACTGAAACATGCAAATGCAAAGC
CATTTGAAGTGCCCTTCTTGAAATTTTAAGCCCAAATATGACACTGGCCATTTTGTAAACGAGACCACCAGGCC
TTCTTCACTAAGACTTTGTATTCAACTTAGTTTAATGTAGATTGTCATTAGCTTTTTCGTAAAAATAAAGCACA
GAACAGATGTGGTGGTGGTATGGAATTGTAATTACAGGTAGGTTGTGACCTTCCTTTAAATTTGTTATAACTCCA
GCTAAAATTAACAAAGAATATAAATGCAAGTATGTTTACTCCAATTTTTTTAAAGCTCAACAGCAGTTAACTACA
GCTCAGTTACTTTTCTAGTCCAGTCTGGTAGACAGGGGTATTTGTATAGAGAAATAGACCTGAGTTCTCAATTAG
GTCA

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FIGURE 2899

TGCGTTTAGGGCGAAGACGGAGTTGTAACTTCTTAAAATTCCTCTCTCGACACTTCGGTAATTCCTCTTTCGAG
ACTAAAGCTCTTTTTGTATGCGTGTGTGTCAAGCGTATGCCCCGGGATTCTCCTCCGCTTCCTTTTCTCGGTCTT
CCTTCTTGCTTTAGGGACCGGAAGAGTCCTTGAACCAAAATAGCTCGGCGGGCAGCTCCGGGGCCGGCGCCCAGA
GTTCCGGGAGGGTGCAGGCAGGAGAGGGAAAGGCAGCAGCGGCGGCAGCTGGAGGATGAAGAAGGAGCATGTGCT
TCACTGCCAGTTCTCCGCGTGGTACCCGTTCTTCCGAGGCGTTACCATCAAGAGTGTCAATTCTTCCACTTCCTCA
GAATGTGAAGGATTATTTACTCGATGATGGAACCTCTGGTGGTTTTAGGAAGGGATGATCCACCAACACATTCTCA
GCCAGACAGTGATGATGAAGCAGAAGAAATACAGTGGTCTGATGATGAGAACACAGCCACGCTTACGGCACCAGA
ATTTCTGAGTTTGCCACTAAAGTCCAGGAACCTATCAATTCCCTCGGGGGCAGTGTCTTTCCTAAGCTTAATTG
GAGTGCCCCAAGGGATGCGTATTGGATAGCAATGAATAGTTCTCTGAAATGTAAAACCCTCAGCGACATCTTCT
GCTTTTCAAGAGTTCCGATTTTCATCACTCGTGACTTCACTCAGCCGTTTATTCATTGTACTGATGATTCTCCAGA
TCCATGTATAGAATATGAGCTCGTTCTCCGAAAATGGTGTGAATTGATTCTGAGGCTGAGTTTCGATGTTTTGT
CAAGGAAAACAAGCTTATTGGTATTTCTCAAAGAGACTACACACAATACTATGATCATATTTCTAAACAAAAGGA
AGAAATTCGCAGATGCATACAAGACTTTTTCAAGAAACACATACAGTACAAATTCCTAGATGAAGACTTTGTGTT
CGATATATACAGAGACAGTAGGGGGAAGGTGTGGCTCATTGACTTTAATCCATTTGGTGAAGTCACAGATTCCT
GCTGTTACCTGGGAAGAAGTATCTGAGAACAACCTAAACGGCGATTTTAGTGAAGTTGACGCTCAAGAGCA
GGATTCCCCAGCTTTCCGTTGCACAAACAGTGAAGTGACAGTCCAGCCCAGCCCCATTTGAGTTACCGGCTACC
CAAGGACTTTGTAGACCTCTCTACTGGGAGGGACGCTCACAAGCTAATAGACTTCCTTAAGCTGAAGAGAAATCA
GCAGGAGGACGACTGATGAGCGTACTGTAACCTGGAGAAGAGGAGGCCCCGCCCCACCGCTCCGGGAGCTGCTCAT
CAGCCGCAACTTCCTGCCGACCCTGATGCGGGTGGGCCGAGCAGTGTGGACATCAGCCACTTTTTATATTCAATGT
ACATTCACCTGGGGAAAAAACGGAGGGACTTTGCTACTTGTAAAAATAACATAATAAATAGATCTTAAACATAG
GAAAACCATACTGTTCTGATAATAAAATGCTTTCTATGAAAT

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FIGURE 2900

MKKEHVLHCQFSAWYFFFRGVTIKSVILPLPQNVKDYLLDDGTLVVSGRDDPPTHSQPDSDDAEAEIQWSDDENT
ATLTAFEPFEPFATKVQEPINSLGGSVFPKLNWSAPRDAYWIAMNSSLKCKTLSDIFLLFKSSDFITRDFTQPFIH
CTDDSPDPCIEYELVLRKWCELIPGAEFRFCVKENKLIGISQRDYTQYYDHISKQKEEIRRCIQDFFKKHIQYKF
LDEDFVFDIYRDSRGKVLIDFNPFGEVTDSSLFTWEELISENNLNGDFSEVDAQEQDSPAFRCTNSEVTVPSP
YLSYRLPKDFVDLSTGRDAHKLIDFLKLKRNQQEDD

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FIGURE 2901

CCGGCTCCCGCAGGGCCGCGCCGAGGCAGGCGAGCCCCGCGGCGCCCAGGCGCGGGCCCCGGGCCCCCGCCGCCG
CCGCCGCCCGCGGGCGCGGCATTTTTATTAGGCGACGCTTAAGGGAGCCCCGGCCGCGCCCGGTGCATTGTGGGA
GCGGCCCCGCGGCCCGTTTTTCGGGAGGAGGCGGAGGGCGCAAAGCGAGCCGGTGGATCCATAAAGAAGCCAGCCAA
CCCCGAGAGGGAGGGGAGGGGCTGAGCTGTGAGGAGAGCGGGGCCCAAGAACCATGTCTACGCGGGAGTCTTTA
ACCCGGAAGTTACGAATTGGACAAAAGCTTCCGGCTAACCAGATTCACTGAAGTGAAGGGCACAGGCTGCAAAG
TGCCCCAAGATGTCCTGCAAAAATTGCTGGAATCTTTACAGGAGAACCCTTCCAAGAAGATGAGCAGTTTCTGG
GAGCCGTTATGCCAAGGCTTGGCATTGGAATGGATACTTGTGTCAATTCCTTTGAGGCACGGTGGGCTTTCCTTGG
TTCAAACACAGATTACATTTACCCGATCGTAGACGACCCTTACATGATGGGCAGGATAGCGTGTGCCAATGTCC
TCAGTGACCTCTATGCAATGGGGGTCACGGAATGTGACAATATGCTGATGCTCCTTGGAGTCAGTAATAAAATGA
CCGACAGGGAAAGGGATAAAGTGATGCCTCTGATTATCCAAGTTTTAAAGACGCAGCTGAGGAAGCAGGAACAT
CTGTAACAGGCGGCCAAACAGTACTAAACCCCTGGATTGTCTGGGAGGAGTGGCTACCACTGTCTGCCAACCCA
ATGAATTTATCATGCCAGACAATGCAGTGCCAGGGGACGTGCTGGTGTGACAAAACCCCTGGGGACACAGGTGG
CAGTGGCTGTGCACCAAGTGGCTGGATATCCCTGAGAAATGGAATAAGATTAACTAGTGGTCACCCAAGAAGATG
TAGAGCTGGCCTACCAGGAGGCGATGATGAACATGGCGAGGCTCAACAGGACAGCTGCAGGACTCATGCACACGT
TCAATGCCCACGCCGCCACTGACATCACGGGCTTCGGGATTTTGGGCCATGCGCAGAACCTGGCCAAGCAGCAGA
GGAACGAGGTGTCTTTGTAATTCACAACCTCCCGGTGCTGGCCAAGATGGCTGCGGTGAGCAAGGCCTGCGGAA
ACATGTTTCGGCCTCATGCACGGGACCTGCCCGGAGACTTCAGGCGGCCTTCTGATCTGTTTACCACGTGAGCAAG
CAGCTCGGTTCTGTGCAGAGATAAAGTCCCCCAAATATGGTGAAGGCCACCAAGCATGGATTATTGGGATTGTAG
AGAAGGGCAACCGCACAGCCAGAATCATAGACAAACCCCGGATCATCGAGGTCGCACCACAAGTGCCCACTCAAA
ATGTGAATCCACACCCGGGGCCACCTCTTAATCTAGACAGAAATAGCTGTTTGGTTTTGTTTTAAATAGATCT
ATTTCCCTTATCACTTCAATTAAAGACTATAAACAACAAAAATCTCATTGTGTCTACACATCGGGGTGACCTTAG
GTCGGTTTTGTAAGTGGATACAATTAATAAAATAAAATCCATTGCCTTTTTTTCCTGTTACATTAAGTGAAGATGC
ACCTAATCTTGAGGCAGCTTCTGAGTTGAGAATT

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FIGURE 2902

GAGAGCCCTCCTCAGGGGCTGTCTCTGCCTTCCCTTCTTCCCATGTGTATCTGGGGCAGCTGAGGCAGGGCTAGG
AGAAGAGCCAGGTTCTCCTGCCACCTCCAAGCGATGAAGCAGCCCTGGGCCAACTCCAGCATTCTCGTGTGAA
CTGCAGAGGAGCCCTGCGCTTCCAGCTACTTGCAGCCAGACAGCCACCTGAGGATATTGACCATAAGGACTCAT
ATCTCATTACAAGAAGCATCATGGCCGAGCCAGACTACATAGAAGATGACAATCCTGAACCTATTAGGCCTCAGA
AACTGATCAATCCTGTAAAAACCTCCCGGAACCATCAAGATCTTCACAGAGAACTTCTTATGAATCAAAAAAGGG
GTCTTGCTCCTCAGAACAAACCAGAATTGCAGAAGGTGATGGAAAAAGAAAACGAGACCAAGTAATAAAGCAGA
AGGAAGAAGAAGCACAGAAGAAGAAATCTGACTTGGAATAGAGCTATTAAACCGGCAGCAGAAGTTGGAGCAGC
TTGAACTTGAGAAGCAGAAATTGCAAGAAGAGCAAGAAAATGCCCCGAGTTTGTGAAGGTGAAAGGCAATCTCA
GGAGAACAGGCCAAGAAGTCGCCCAAGCCAGGAGTCCTAGGCTGAGGCTGCACCAAGACCTCGTGTGTCAACCC
ACAGAGCTGTCTGTGGGTGCCTTCTCAATCTCAGGGCAAAAGCCCCTGGAGAATAATTTAGCCAGCAGAGAATTT
TGACTTGCACTAGGATTTGGTTTGATTTTCTACGATCTGGGTGGATGCCTTGCTGTGACAGTTGCAGTTCCCTA
TTCGCCAAATGAAGGGCAGTGCCCGCACGTAAGTTGGAATGATGGACCTGTGTTAGAGACTTAACAGAACC
CAAGCAAAACAAGTGAGAACAGGAAAAAGGAAGAGGACACTGGAATCAATTTCTTGAGAGTTGCACTACTTGGTTT
TTCTTCCATTCCAAGTTTCGTGGGACCCAGAGCCTTTTTCTTTTAAAGCTAAAAACAAGTGTTTAAATTCCTC
TTTTTGTATCTGTAGATAATTGAGATCACCTAGAAATGCGTTTAAATCTGTTCACTCACTGTAAATTTTGAGGA
CCCAGAATTGTCTTGTAAATTTATACTTTCACCCCTGTGTCAGTTAACACCAGAGAAGGAACGTGAATGTCGAG
CACAGCCACTACCCTGTGTCCTTAATTTAGAAATAGGGTGAGAAGTTTAAAGGCCATCTTGATTTTATTTT
CATTCTTTTGGTTCTCTGTGTAATAATAGCAGGCTACATAGTGACATTCCAGTTCCAAGAAGGTACATCCTGTC
CATTCAATTAATGCTTTGATTACTAGGAGGGTTTCTGTTGAGTTTGTGTTTTAAATGTCTTGCTGATCTAGTTCT
TTCAGATGGAATAACCTTCCAGTCCCTTAGAGAGTGGAAGTCTAGTCCATATAACCCAGCTTCCAGTAGCAAAAGTAG
AAGCCGCCACATCTTTTCATTCTCCAAGAGGAGAGTGGGGAAGGTTCCCATGACCAGCTGGGCAGTCAGGATTT
CTCTAGGCATTCTAATGTGAAATAAGTGTAGACTGCTGTCAAGGAGGCTTCATCAGAAGATGTATAGCATTTGAA
TGTCTAATGATAATGCATATCATAGAAATCCAAGCTTTGAAAAATTTCTGATTAATGCTCATGTATTTCTTTATCT
TTGTTTTTCTTGTGAAGAAAGACTTTCACCACTGTCTGAGTGATGATGCTGTTGATAAGGATGATGTCGATGAC
TACTATATTGCATCTCTCAGGAACAGCTGATGGGAAGGGAGGGGCTGCTGAGTTCCCTTGTCTAGCTAGCAGCA
CGCTCCTCAGAGAGGGGGCCGAGTTACAGACAGCAGCCGCATTCTCATGCAAAATAGTTTTAACTGCTAGTGT
GGGCATCGGTACCTTTTGCTGGGTGATACCGAAGAAATGTTGAGGATTTAGTATGCTCCGTAGAGACAGTTTCA
CCAGTCATTTCTGCATTGGAGAGACTTCTCATACTTTCTTTGAAGACTCATAGAAAGCTGGATCTAGAGCTTTTG
AATCCTTAATTAGCACAGTAGAAATTAGCTTTCTATGGGAATGCTTTAGTGTTAGCAGTTGACAATTAGGCCCAT
ATTCAATCTGAATGGGAACAAAAGTAAATGCAATGATAATATACTGCTAGTTAGAGAAACATGTTAGTTGATTAT
ACCTGAAATGGATTATTTATCTCATCAGCAAGTATTATTTGAATAAAATGAGAAATGCTTAAGAAAAATTTGTTGC
TCTACAGTAATTTGGTTTCGAAGAATGGAATGGTAACTATTTTTTCCCATCGTTCTTTTGAGAGAAGGAAGTGTG
ATGACTGATGATCTTGAAAGGCCATTTCTGATTGCACGTTGACTGGAATCTTTCTTTGTGTCTGTGGACTAGC
GATGCTGTTTGTAAATGAAGATTCGGGACTGGCTCATATCTTTTATCTAACTAGATGTCAGATCTTGAAATCT
GTATTCTCGAAGCAATTCTGCCACTTGATCGTATTACAGGGGGCCCTGGTAGGCTCCTTTAGAAGGACCATTCT
GTTCTTAGAGCTTAAGTAGAATTCAATCTTCACTGAAAAAAAAAAGTTACTTAAGAAAGCATTTCTTTCTTAA
TCTCACTCAAATCTGCAGAATTATTTGTAATTAGTAATACAAAATCTGGCCAAAAGGAGACTTGTAATAATAGCGTA
AAGTGGTGTCTTATGCTAAACGGTGGAAATGTATAGGCAGAGAAGCTCTTTGAAGTTGTCAGATGAGCTGGGCTCA
CAAGCCTGATTCAAACAGGCTGTCGGTCTCCTCTCACCCTTAATACTGTGCAGCCCAACTCCTAGGACTCTTG
AACATCTGAGCAGTTTTGTGCTTTGAGCCACTTTTTGACAAAAATGGCTCCATTTTCCACAGCGTGGTTTTCTT
AAAATAGTTTTAATGTTTTATAGTCTCATAGTAGTAGTGTGCTTTCTAAGCTATAACAGTCGACTTTATTCTTCT
ACTCTGAAAAATCTTGACTTGTTTGTAGTGTATATAATATATAAAGGGAGCCTTAATGGATTGGTTTTTCATAAT
TTAATATTTTTTGTATTGCTCTTGTATAATTGTTTTTAAACGGAAGTATTAAGAAATTGAGGGTGGAAATCTTA
GAACCAAAGTTATTCTTAATAAAAATCACCACATGCTTGACCATGCAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2903

MAEPDYIEDDNPELIRPQKLINPVKTSRNLHQLHRELLMNQKRGAPQNKPELQKVMKRKRQDQVIKQKEEEAQK
KKSDLEIELLKRQKLEQLELEKQKLQEEQENAPEFVKVKGNLRRTGQEVAAQES

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FIGURE 2904

CGCGCCAGAGACGCAGCCGCGCTCCCACCACCCACACCCACCGCGCCCTCGTTTCGCCTCTTCTCCGGGAGCCAGT
CCGCGCCACCGCCGCGCCGAGGCCATCGCCACCCTCCGCAGCCATGTCCACCAGGTCCGTGTCTCGTCTCTCT
ACCGCAGGATGTTTCGGCGGCCCGGGCACC GCGAGCCGGCCGAGCTCCAGCCGGAGCTACGTGACTACGTCCACCC
GCACCTACAGCCTGGGCAGCGCGCTGCGCCCCAGCACCAGCCGCGAGCCTCTACGCCTCGTCCCCGGGCGGCGTGT
ATGCCACGCGCTCCTCTGCCGTGCGCCTGCGGAGCAGCGTGCCCGGGGTGCGGCTCCTGCAGGACTCGGTGGACT
TCTCGCTGGCCGACGCCATCAACACCGAGTTCAAGAACACCCGCACCAACGAGAAGGTGGAGCTGCAGGAGCTGA
ATGACCGCTTCGCCAACTACATCGACAAGGTGCGCTTCTGGAGCAGCAGAATAAGATCCTGTGGCCGAGCTCG
AGCAGCTCAAGGGCCAAGGCAAGTCGCGCCTGGGGGACCTCTACGAGGAGGAGATGCGGGAGCTGCGCCGGCAGG
TGGACCAGCTAACCAACGACAAAGCCCGCTCGAGGTGGAGCGCGACAACCTGGCCGAGGACATCATGCGCCTCC
GGGAGAAATTGCAGGAGGAGATGCTTCAGAGAGAGGAAGCCGAAAACACCCCTGCAATCTTTCAGACAGGATGTTG
ACAATGCGTCTCTGGCACGTCTTGACCTTGAACGCAAAGTGGAATCTTTGCAAGAAGAGATTGCCTTTTTGAAGA
AACTCCACGAAGAGGAAATCCAGGAGCTGCAGGCTCAGATTAGGAACAGCATGTCCAAATCGATGTGGATGTTT
CCAAGCCTGACCTCACGGCTGCCCTGCGTGACGTACGTACGCAATATGAAAGTGTGGCTGCCAAGAACCTGCAGG
AGGCAGAAGAATGGTACAAATCCAAGTTTGCTGACCTCTCTGAGGCTGCCAACC GGAACAATGACGCCCTGCGCC
AGGCAAAGCAGGAGTCCACTGAGTACCGGAGACAGGTGCAGTCCCTCACCTGTGAAGTGGATGCCCTTAAAGGAA
CCAATGAGTCCCTGGAACGCCAGATGCGTGAAATGGAAGAGAACTTTGCCGTTGAAGCTGCTAACTACCAAGACA
CTATTGGCCGCTGCAGGATGAGATTGAGAATATGAAGGAGGAAATGGCTCGTCACCTTCGTGAATACCAAGACC
TGCTCAATGTTAAGATGGCCCTTGACATTGAGATTGCCACCTACAGGAAGCTGCTGGAAGGCGAGGAGAGCAGGA
TTTCTCTGCCTCTTCCAACTTTTCTCCCTGAACCTGAGGGAACTAATCTGGATTCACTCCCTCTGGTTGATA
CCCACTCAAAAAGGACACTTCTGATTAAGACGGTTGAAACTAGAGATGGACAGGTTATCAACGAAACTTCTCAGC
ATCACGATGACCTTGAATAAAAATTGCACACACTCAGTGCAGCAATATATTACCAGCAAGAATAAAAAAGAAATC
CATATCTTAAAGAAACAGCTTTCAAGTGCCTTTCTGCAGTTTTTCAGGAGCGCAAGATAGATTTGGAATAGGAAT
AAGCTCTAGTTCTTAACAACCGACACTCCTACAAGATTTAGAAAAAGTTTACAACATAATCTAGTTTACAGAAA
AATCTTGCTAGATACTTTTTTAAAAGGTATTTTGAATACCATTAAAAGTCTTTTTTTTTTCCAGCAAGTATC
CAACCAACTTGGTTCTGCTTCAATAAATCTTTGGAAAA

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FIGURE 2905

MSTRSVSSSSYRRMFGGPGTASRPSSSSRSYVTTSTRITYSLGSALRPSTSRSLYASSPGGVYATRSSAVRLRSSVP
GVRLLQDSVDFSLADAINTEFKNTRTNEKVELQELNDRFANYIDKVRFLQQNKILLAELEQLKGQKSR LGDLY
EEEMRELRRQVDQLTNDKARVEVERDNLAEDIMRLREKLQEEMLQREEAENTLQSFQDQVDNASLARLDLERKVE
SLQEEIAFLKKLHEEEIQELQAQIQEQHVQIDVDVSKPDLTAALRDVRQQYESVAAKNLQEAEEWYKSKFADLSE
AANRNNDALRQAKQESTEYRRQVQSLTCEVDALKGTNESLERQMRMEENFAVEAANYQDTIGRLQDEIQNMKEE
MARHLREYQDLLNVKMALDIEIATYRKLLGEESRISLPLPNFSSLNLRETNLDSLPLVDTHSKRTLIIKTVETR
DGQVINETSQHDDLE

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FIGURE 2906

ATGGAGGGAGCAGAACAACCACACAAGGAGCCCATGCCTTGGCTACAGTCAAACCTTCAGCGTGTCTATAAGGCA
TGTCGTCGCATTTGTGCAAACATTCAGCGGCCTCTTATGTTACAGATGACTCCCCCTGGTGGTGAGGAGATGGCA
TTTCCTCCCTGTGTGCAGGTAAAGACTCAAACACTGATTACAGAGCTGCTGTCCCATCTACTCACTGCTCCCATGT
TCGGCTGGCGCTGAGGAGACACCTTTAGCTGCTGTGACCCCATGGTCACAAAAGCCACAGAGCTCAGAGCTGCTC
CTCAAAGAACATCCTCCCTGTTTGCTTCTTTCTAGCCCCCTCTCCTTTCTGGTATCCACGGAACCTATCCTATGAT
GTGACAGAAGAGTCAATTAAGGAATTCTTTAGAGGATTAATTATCAGTGCAGTGCCTTTACCACGTGAACCCAGC
AATCCAGAGAGGAGAATTCGAGTGGACGTTGCTGATCAAGCACAGGATACAGACAGGGACGATCGTTCTTTTGGC
CGTGATAGAAATCGGGATTCTGACAAAACAGATACAGACTGGAGGGCTCGTTCTGCCACAGACAGCTTTGATGAC
TACCCGCCTAGAAGGGGTGATGATAGGTTTGGAGACAAGTATCGAGATCGTTATGATTACAGACCAGTCTGGCCGT
GGGTATTGGTATGAGTATCGGGATGGCCCATGCCGGGATATGGATCGATATGGCTGGCGGGATCGCTATGATGAC
CGAGGCAGCAGAGACTATGCTAGAGGCTATCATTCCTGGATAGGCAGTGGCAGAAGGGCATTGGCAGTGGGTAC
CCAGGGACAATGACTACAGAGGAGGCAGGGACCGCTATGAAGACCGATACAACAGATGGGATGATGGGTCTGTGCA
GCTCCAGAGATGATTTCTCTCGGGATGATTATAGGTATAATGATAGACGTCCCCCGTCCCCCTCAAAGACCCAAA
CTGAATCTAAAGCCTCATAATACTCCTAAGGGAGATGATTCCTTCTGCTAGTACCTCCCAGTCCGGTTCGAGCTTAT
TTTGCTTTTGAGGGGGCAAAGCCCGTTGATAGAGCTGCTAGAGAAACAAAAAGACACCCAAGCTGGCGAAGTGAA
GAAACCCAGGAACCGGAGAGGCACCCAAGCTGGCGAAGTGAAGAACTCAGGAACTGGAACGGTGGAGGACAGGA
AGTGAGTCATCGCACACTGGGACCTCCGCCACACCCGGCAAAAGTCAATCAGACCAGGATGCAGGAAGGAGAGAG
ACTGAAAAGTCTCTAGAAAATGAAACACTCAGTAAGGAGGAAGACTGTCACTCTCCAACCTCTAAATCTACCAAA
ACTGATCAGCCCCAAAAGAGCTCAGACACACAGCACGAATACCCTACAAGTGGTGGGGGAAAAGTAACTCCAGCT
CAACCGTCTGAGAAAGGACCAGCAAGGAAAGATGAAAATAAAGTAGGTGTGGTGAATGTCCCCAAAAGACCACACT
GGGAACTCTAGCCATGGTCCAGGAGACAGAGGGAACAAAGACCCTGGAAGGAGTCAGATAGGAAAGATGGCAAA
AAGGAGCATGACTCCAGATCTGCACCTGAGCCAATATGTGAAATACGGAATTTG**TGA**

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FIGURE 2907

MEGAEQPHKEPMPWLQSNFSVSYKACRRICANIQRPLMFTDDSPGGEEMAFPPCVQVKTQTLIQSCCPIYSLLPC
SAGAEETPLAAVTPWSQKPQSSELLKEHPPCLLLSSPSFWYPRNLSYDVTEESIKEFFRGLIISAVRLPREPS
NPERRIRVDVADQAQDTRDDRSFGRDRNRDSKTDTDWRARSATDSFDDYPPRRGDDRF GDKYRDYDSDQSGR
GYWYEYRDGFCRDMDRYGWRDRYDDRGSRDYARGYHSWIGSGRRAFSGYPGTMTEEAGTAMKTDTTDGMGRA
APEMISLGMIIIGIMIDVPRPPQRPKLNLPKHNTPKGDDSSASTSQSGRAYFVFGGAKPVDRAARETKRHPSWRSE
ETQEPERHPSWRSEETQELERWRTGSESSHTGTSATPGKSQSDQAGRRETEKSLENETLSKEEDCHSPTSSTK
TDQPOKSSDTQHEYPTSGGGKVTPAQPSEKGPARKDENKVGVVNPKDHTGNSSHGPGDRGNKDHWKESDRKD GK
KEHDSRSAPEPICEIRNL

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FIGURE 2908

AGAACATCCAGTCATGGATAAAAATGAGCTGGTTTCAGAAGGCCAACTGGCCGAGCAGGCTGAGCGATATGATGA
CATGGCAGCCTGCATGAAGTCTGTAAGTGAAGGAGCTGAATTATCCAATGAGGAAAGGAATCTCCTCTCAGT
TGCTTATAAAAATGTTGTAGGAGCCCATAGGTCATCTTGGAGGGTCGTCTCAAGTATTGAACAAAAGACGGAGGG
AGCTGAGAAAAAACAGCAGATGGCTCGCGAATACAGAGAGAAAATTGAGACGGAGCTAAGAGATATCTGCAATGA
TGTACTGTCTCTTTTGGAAAAGTTCTTGATCCCCAGTGCTTCACAAGCAGAGAGCAAAGTCTTCTATTTGAAAAT
GGAAGGAGATTACTACCGTTACTTGGCTGAGGTTGCCGCTGGGGATGACAAGAAAGGGATTGTGGATCAGTCACA
ACAAGCGTACCAAGAAGCTTTTGAATCAGCAAAAAGGAAATGCAACCAACACATCCTATCAGACTGGGTCTGGC
CCTTAACCTTCTCTGTGTTCTATTATGAGATTCTGAAGTCCCAAGAGAAAGCCTGCTCTCTTGCAAAGACAGCTTT
TGATGAAGCCATTGCTGAAGTTGATACATTAAAGTGAAGAGTCATACAAAGACAGCACGTAATAATGCAATTACT
GAGGGACAACCTGACACTGTGGACATCAGATACCCAAGCAGACGAAGGTGAAGCAGGAGAAGGAGTGGAAAAATTA
ACCGGCTTCCAGCTTTTGTCTGCCTCATTCTAAAATTTACACAGTAGACCATTGTCTATCCATGCTGTCCACACA
AATAGTTTTTTGTTTATGACTTATGTCAGGTTTATGTTACTTCTATTTGAATTTCTCTATTTCCCATACGGTTTC
TATGTTTAAATATTAGGGGAGGAGAGGAAGTTAACATTTAGGGAGTTATCTGTTTTCATCTTGAGGTGTTCAATAT
GGGGACGTGGAATTTTTATACAGGTTATAAATGTTTGGCATAGTACTTTTGGTATATTGTGGCTTCACAAGGGCC
AGTGTTAAACTGCTTCCATGTCTAAGCAAAGAAAAGTGCCTACATATTGGTTTGTCTGGTGGGGAATAAAAGG
GATCATTGGTTCCAGTCACAGGTGTAGTAATTGTGGTACTTTAAGGTATGGAGCACTTACAAGGCTGTGGTAGA
AACAGATGCCCCATGGATACCACATGTAAACCATGTATAATTGTGAATACTCAATCTCATACCTTTGACCACA
GCTGCAGAAGTGTCTTTTAGACACAGTTGTGACCCATTTTACTCTGTATAAGGGCAGAAATGGTTCACATTCCA
TTATTTATAAAGTTACCTGCTGTAGCATTCTATTATTTTGTCTACACTCATTTTATTTGTATTTAAATGTTTTAG
GCAACCTAAGAACAAATGTAAAAGTAAAGATGCAGTAAAATGAATTGCTTGGTATTCACTACTTCATGTATATC
AAGCACAGCAATAAAACAAAAACCCATGTATTTAACTTTTTTTAGGTTTTTGTCTTTGTGATTTTTTTGATAC
TTGCCTAACATGCATGTGCTGTAAAATAGTTAAACAGGGAAATAACTTGAGATGATGGCTAGCTTTGTTTAAATGT
CTTATGAAATTTTCATGAACAATCCAAGCATAATTGTTAAGAACACACGTATTAAATTCATGTAAGTGAATAAA
CGTTTTATGAATGGACTTTTCAACTACTTTCTCTACAGCTTTTCATGTAAATTAGTCTTTTGGTCTGAAACTTC
TCTAAAGGAAATTGTACATTTTTTTGAAATGTATTCCTTATTCTCTCTTGGCAGCTAATGGGCTTTTACCAAGTT
TAAACACAAAGTTTATCATAACAACAAAAATACTACTAATATAACTACTGTTTCCATGTCCCATGATTCCCTCTC
TTCTTCCCCACCCTGAAAAAATCAGTTCTATTTTTTCTGGGAGAGGGGGAGATTGATTGGAATAAATGTAAT
ATGTTCCATTTGAAATATTGGTAAATGGCATTCTTCTAAGTATAGGAAGCCACAGTGTCTTGGCCCATCATGACAT
TGGGTAGCATTAACTATAAGTTTTGTGCTTCCAAATAACTTTTTGGTTTTTAAACAATTTCTTGATACTCTTATAG
CCTGCCTTCAGTGTTGATCCTTTATTCTTTCTATCTGTGAGGTGCACAAGATTACCCCTCTTTTATAGCCTTCTG
TCTTTCTTGTACCAACCATTCTCTACTTGGTGGCCATGTACTTGGAAAAAGGCCGATGATCTTTCTGGCTCCAC
TCAGTGTCTAAGGCACCCTGCTTCTTTGCTTGCATCCACAGACTATTTCCCTCATCTATTTACTGCAGCAAAA
TCTCTCCTTAGTTGATGATACTGTGTTTATCTCCCTTTAAACCCCTACCTATCCTGAATGGTCTGTCTATTGTCTG
CCTTTAATCCTTCTCTTTCTCTTCTCTATTCTCTAAATAATGATGGGGCTAAGTTATACCCAAAGCTCACTTT
ACAAAATATTTTCGTGAGTACTTTGCAGAAAACACCAACAAAAATGCCATTTTAAAGAGGTGTATTTTTTATTT
CAGAATGTAAGCTCCTCAAGAACAGGGACAATGTTTTCTGTATGTTCTATTGTGCCTAGTACACTGTAAATGCTC
AATAAATATTGATGATGGGAGGCAGTGAATCTTGATAAGGGTGAGAACTGAAATCCC

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FIGURE 2909

GCTCGGAGCCTCGGCGGACCTTGCTGCCTCTGTCTCTTTAACGCGAGAGGAAGCGATGCAGAGGGGTGGAAAATG
GCAGAGCTGCAGATGTTACTAGAGGAGGAGATCCCGTCTGGCAAGAGGGCGCTGATCGAGAGTTACCAGAACCTG
ACTCGGGTGGCAGACTACTGTGAAAACAACCTACATACAGGCTACAGACAAGAGAAAAGCTTTAGAGGAGACCAA
GCCTATACAACCCAATCTCTAGCTAGTGTGCTTATCAAATAAATGCATTGGCCAACAATGTACTCCAGTTGCTG
GATATCCAAGCCTCTCAGCTTCGGAGAATGGAGTCTTCCATCAATCATATCTCACAGACTGTGGATATTCATAAG
GAGAAAGTGGCACGAAGAGAGATTGGTATTTTGACAACAAATAAGAATACATCAAGAACTCACAAAATAATAGCA
CCTGCGAATATGGAGCGCCCTGTAAGGTATATTCGGAAACCTATCGATTACACAGTTCTGGATGATGTGGGCCAT
GGTGTCAAGTGGCTAAAAGCCAAGCATGGAAATAACCAGCCTGCAAGAACTGGCACACTGTGAGAACAAATCCT
CCTACTCAGAAACCGCCAAGTCTCTCCCATGTGAGGCCGGGGAACACTGGGACGGAATACTCCTTATAAAACCTG
GAACCTGTTAAACCCCCAACAGTTCCTAATGACTATATGACCAGTCTCTGCTAGGCTTGGAAGTCAGCATAGTCCA
GGCAGGACAGCATCTTTAAATCAGAGACCAAGGACACACAGTGGAAAGTAGTGGAGGAAGTGGAAAGTCAGAAAAC
AGTGGTAGCAGTAGTATTGGCATTCCCATTTGCTGTGCCTACACCTTCGCCACCCACTATTGGACCAGAAAACATT
TCTGTCCCTCCTCCTTCTGGAGCTCCACCAGCACCACCTCTGGCACCCTTCTCCAGTGAGCACTGTGATAGCA
GCCCCGGGCTCAGCTCCTGGTTCCTCAGTATGGCACAATGACCAGGCAGATATCTCGACACAACCTCTACTACTTCT
TCGACATCTTCTGGTGGATACAGACGAACTCCCTCTGTGACTGCTCAATTTCTGCTCAGCCTCATGTTAATGGA
GGTCCACTTTATTCTCAAAATTCAATTTCTATTGCTCCACCCCTCCCCCTATGCCTCAGTTGACTCCACAGATA
CCTCTCACAGGCTTCGTGGCCAGGGTGCAGGAAAACATTGCTGATAGTCCAACCTCCACCGCCACCACCTCCACCA
GATGACATTCCCATGTTTGATGACTCTCCACCTCCCCCACCACCACCAGTGGATTATGAAGATGAGGAGGCT
GCAGTAGTTTCAGTATAATGATCCATATGCAGATGGGGATCCTGCTTGGGCCCCAAGAATTATATTGAGAAAGTT
GTTGCAATATATGATTATACAAAAGACAAGGATGATGAGCTGTCATTTATGGAGGGTGCAATCATTTATGTTATA
AAGAAGAATGATGATGGCTGGTATGAAGGAGTCTGCAATCGAGTGACTGGTCTGTTCCCTGGGAACATATGTTGAA
TCAATCATGCACTATACTGATTAATTTTTTTTTTTCTTTTGAAGTAGATTCTTATTACTCAGTCATACTGTGGGA
CTATTATGGTTAACAGAAGTGTCTTAATATGTTTTTAAATGTGCCCATATTTTCAGAACATGCTGTTTTATTGGT
AAATTGAATGTCTACCTGTAAGCATAAATCTTTGAGGCAGTTTATGTATTGCTGAATAGCAATTTATACAAGAAG
CTGTCCATAACIGATTATGCTTATGTACTTACTTACACATTTTAACTTTATGACCAGCCTAAATATTCTGGGGG
AAGTGGGGTATAATATTTAAACGAATCATGATTCAGATTGTACCATTACATGTTTCAGTGCAGCATGGTTACTAAC
GCTATGTCAGACTAATATTAAATCAGAAAATTTAAATGCTGGTGCTGGTCAGACTTTTTTTGTTAGATTCTCTC
ATTTAAAAAAATACGTGTTTGTGTTAAAGCATGCATAAAAATTTATGTATTGAAATATACTTAAAAATTCAAGATG
CTTCCCATTGTTGTAATATTTACCTGGAGGACTCGTACTTAGGTGCTTAACGTGAATTGAGTCTCCAAGGTCTC
CATGTGAAACAAGCAAAAAGAGAATTATCTGTAATGTTGTAATTTGTACCTAAGTTTTTTAATGAGTGAAATTTG
CATTATAAACTTTTTCCATTCTATAAATACATAAGTGAACCAAGGTTTTTGTCTTTCTTCACTGATTTGCTTT
AAAAAAATAAAAGATAATGATTTATTG

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FIGURE 2910A

GGGGAGGCCATTTTCCGTTTCTGGGAGGAGTGAGGGGCAACGGGTGCGAGAAAAAGGAAAAAGAAAGGGCTCAGC
GCCTCCCCGCCGGGCGTGGACAGAGGGGCACAGTTTCGGCAGGCGGGTGAGGTGCTGAGGGCCCGCCGGAGAT
GTTTTCTTGTGAGCAGCGTGCAACCCAGGTTACAGTTCTCTGAGTCATCTCATCAATGCCTTCCATACACC
AAAAACACTTCTGTTTCTCTCAGTGGAGTGTCAGTTTCTCAAAACAGCATCGAGATGTAGTTCTGAGCATGA
GGCTCCCAGCAGTGAGTGATGTTTCAGTGACTTCTGACGAAGCTTAACATTGTTCAATTGGCAAAGGAAAAAT
ATTGGAAGGTACAGATCCATGTTTCATGGAGCCAGCAAAAAGGATGAAGAAGAGCTTGGACACAACCGATAACTG
GCACATCCGTCCAGAACCCTTCTCCCTCTCAATCCCTCCTTCACTTAACCTAAGGGACCTTGGATTATCTGAACT
AAAAATTGGACAGATTGATCAGCTGGTAGAAAATCTACTTCTGGATTTTGTAAGGCAAAAACATTTCTTCCCA
TTGGCATACATCCCATGTCTCTGCACAATCCTTCTTTGAAAATAAATATGGTAACCTAGATATATTTAGTACATT
ACGTTCTCTTGTCTGTATCGACATCATTCAAGAGCTCTTCAAAGCATTGTTTCAGATCTTCAGTACTGGCCAGT
TTTCATACAGTCTCGGGGTTTTAAACTTTGAAATCAAGGACACGACGTCTCCAGTCTACCTCCGAGAGATTAGC
TGAAACACAGAATATAGCGCCATCATTCTGTAAGGGGTTTTCTTTGCGGGACAGAGGATCAGATGTTGAGAGTTT
GGACAAACTCATGAAAACCAAAATATACCTGAAGCTCACCAAGATGCATTTAAACTGGTTTTGCGGAAGGTTT
TCTGAAAGCTCAAGCACTCACACAAAAACCAATGATTCCCTAAGGCGAACCCTGCTGATTCTCTCGTTCTGCT
GCTATTCTGGCATTATGGAATTTCTAAAAACCCATTTTTATCTGTCCGCTTCCGGACAACAACAGGGCTTGATTC
TGCAGTAGATCCTGTCCAGATGAAAAATGTCACCTTTGAACATGTTAAAGGGGTGGAGGAAGCTAAACAAGAATT
ACAGGAAGTTGTTGAATTCTTGAATAATCCACAAAAATTTACTATTCTTGGAGGTAACTTCCAAAGGAATTCT
TTTAGTTGGACCCCGAGGACTGGAAAGACACTTCTTGCCGAGCTGTGGCGGGAGAAGCTGATGTTCTTTTTTA
TTATGCTTCTGGATCCGAATTTGATGAGATGTTTGTGGGTGTGGGAGCCAGCCGTATCAGAAATCTTTTTAGGGA
AGCAAAGGCGAATGCTCCTTGTGTTATATTTATTGATGAATTAGATTCTGTTGGTGGGAAGAGAATTGAATCTCC
AATGCATCCATATTCAAGGCAGACCATAAATCAACTTCTTGCTGAAATGGATGGTTTTAAACCCAATGAAGGAGT
TATCATAATAGGAGCCACAACTTCCCAGAGGCATTAGATAATGCCTTAATACGTCCTGGTCTGTTTGCATGCA
AGTTACAGTTCCAAGGCCAGATGTAAAAGGTGCAACAGAAATTTGAAATGGTATCTCAATAAAATAAAGTTTGA
TCAATCCGTTGATCCAGAAATTATAGCTCGAGGTACTGTTGGCTTTTCCGGAGCAGAGTTGGAGAATCTTGTGAA
CCAGGCTGCATTAAGAGCAGCTGTTGATGGAAGAAGAGTGTGGAATTTGATAACAAAAACAAAACCATCACAGCATATCATGAATC
TGGTCATGCCATTATTGCATATTACACAAAAGATGCAATGCCTATCAACAAAAGCTACAATCATGCCACGGGGGCC
AACACTTGGACATGTGTCCCTGTTACCTGAGAAATGACAGATGGAATGAAACTAGAGCCCAGCTGCTTGCACAAAT
GGATGTTAGTATGGGAGGAAGAGTGGCAGAGGAGCTTATATTTGGAACCGACCATATTACAACAGGTGCTTCCAG
TGATTTTGATAATGCCACTAAAATAGCAAAGCGGATGTTTACCAAATTTGGAATGAGTGAAAAGCTTGGAGTTAT
GACCTACAGTGATACAGGGAACTAAGTCCAGAAACCAATCTGCCATCGAACAAGAAATAAGAATCCTTCTAAG
GGACTCATATGAACGAGCAAAACATATCTTGAAAACCTCATGCAAAAGGAGCATAAGAATCTCGCAGAAGCTTTATT
GACCTATGAGACTTTGGATGCCAAAGAGATTCAAATTGTTCTTGAGGGGAAAAAGTTGGAAGTGAGATGATAACT
CTCTTGATATGGATGCTTGTGTTTATTGCAAGAAATACAAGTAGCATTGCAGTAGTCTACTTTTACAACGCTT
TCCCCTCATTCTTGATGTGGTGTAAATTGAAGGGTGTGAAATGCTTTGTCAATCATTTGTCAATTTATCCAGTTT
GGGTTATTCTCATTATGACACCTATTGCAAATTAGCATCCCATGGCAAATATATTTTGAATAAATAAGAACTAT
CAGGATTGAAAACAGCTCTTTTGGGAATGTCAATTAGTTATTAAGTTGAAAGTAATTAATGATTTTATGTTTGG
TTACTCTACTAGATTGATAAAAAATTGTGCCCTTTAGCCTTCTATATACATCAGTGGAACCTAAGATGCAGTAAT
TATGTTCCAGATTGACCATGAATAAAATATTTTAAATCTAAATGTAGAGAAGTTGGGATTAAGAGCAGTCTCGG
AAACACAGAGCCAGGAATATAGCCTTTTGGCATGGTGCCATGGCTCACATCTGTAATCCCAGCACTTTTGGAGGC
TGAGGCGGGTGGATTGCTTGGAGCCAGGAGTTTCAGACCAGCCTGGCCAACGTGGTGAAACGCTGTCTCTACTAA
AATACAAAAAATAGGGCTGGGCGCGGTTGCTCACGCCTGTAATCCCAGCACTTTTTCAGAGGCCAAGGCGGGCAA
ATCACCTGAGGTCAAGAGTTTGAACAGCCTGGCCAACATGGTGAAACCCCATCTCTACTAAACATGCAAAAAAT
TACCTGGGCATGGTGGCAGGTGCTTATAATCCCAGCTACTCTGGGGGCCAAGGCAGGAGAATTGCTTGAACCTGG
GAGATGGAGGTTGCAGTGAGCTGAGATCATGCCACTGCACTCCAGCCTGGGCAACAGAGCAAGACTCTGCCTCAA
AAAAAATTAAATAAATTTAAATACAAAAAATAAGCCAGGTGTGGGGTGCATGCCTGGAATCCCAGCTACTT
GAGAGGCTGAGGCACGAGAATTGCTTGAACCCAGGAGGTGGAGGTTGCAGTGAGCCAAGATCACAGGAGCCACTG
CACTCCAGCCTGGGTGACAGAGTGAGACTCTGTCTCAAAAAAATAAATAAATTTATATAACCTTTCAGAAAT

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FIGURE 2910B

GCTGTGTGCATTTTCATGTTCTTTTTTTTAGCATTACTGTCACCTCTCCCTAATGAAATGTACTTCAGAGAAGCAG
TATTTTGTTAAATAAATACATAACCTCATTCTGAATAATGTCCTCATTTGACTATAACTGTGCTTGGTTTCAA
AAGCAAAATTAACAAAAATCTCAGTCCCCTCCGAAGTGAACTTTGTGTTACCCTGCGTCAGAAATGCCAAGTTG
TGTTTACTTTTCATTTCAGATTTTGTGAATATGAACATGCTGTTATAGGATCTACAGATGAATATTAACTCAATA
GAAAAATTATTTTAGAACACATTGTATTGGTATTACAACCAGATTATATTCTTGACGTTGACTTCATTAAAT

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FIGURE 2911

ACCGCCATCTTCCAGTAATTCGCCAAAGTGACGAACACAAAGAGAAAGAGGAGGGGCACCCGATATATGTTCTTT
AGGCCTTTTAGAAAACATGGAGTTGTTCTTTGGCCACATATATGCGAATCTATAAGAAAGGTGATATTGTAGAC
ATCAAGGGAATGGGTACTGTTCAAAAAGGAATGCCCCACAAGTGTTACCATGGCAAACTGGAAGAGTCTACAAT
GTTACCCAGCATGCTGTTGGCATTGTTGTAAACACACAAGTTAAGGGCAAGATTCTTGCCAAGAGAATTAATGTG
TTTATTGAGCACATTAAGCACTCTAAGAGCCGAGACAGCTTCCTGAAACGCATGAAGGAAAATGATCAGAAAAAG
AAAGAAGCCAAAGAGAAAGGTACCTGGGTTCAACTAAAGCGCCAGCCTGCTCCACCCAGAGAAGCACACTTTGTG
AGAACCAATGGGAAGGAGCCTGAGCTGCTGGAACCTATTCCTATGAATTCATGGCATAATAGGTGTTAAAAAAA
AATAATAAAGGATCTCTGGGCTAC

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FIGURE 2912

VTNTRKRKRRGTRYMFFRPFRKHGVVPLATYMRIYKKGDIVDIKGMGTIVQKGMPhKCYHGKTGRVYNVTQHAVGIV
VNTQVKGKILAKRINVFIEHIKHSKSRDSFLKRMKENDQKKKEAKEKGTWVQLKRQFAPPREAHFVRTNGKEPEL
LEPIPYEFMA

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FIGURE 2913A

CACTGCTCTGACTGCGTCCTCCCCAGGCTGAAGTGTCTCAGGTTTCATGTGGATTTGCCAGTAATGGATGGCT
CCACCGAGGCCAGGTTGGGGAAGTTCAGCCTCGAGGACACTAGGGGACGAAAACTTCAAAAAGAAGACTCTTTT
TATTAAATATTTTGGCGTTCTTTTTGGAGAGGAACTTTGGGATGTAGCCTTTACCTGTTTCTGAATTTGACATC
CAAAAAGCCTTTTGGAAAACACCATTCTAAATTTATCCTGTTCTGAATCATCATCGCTTCTGATAGATGCAGTTG
CTTGCTGACATCGTGATCTTTGATTTTGTACAACGCTATTTGGGCTAACTTTTGGGATTTTACTTTGTGCTTAGA
ATTTGAAAGTAGTATTTCATTGGAAAGAGACTCCAAGAAAATACTCGAAGACATCAAAAAGCTGGATTTCGAGGGTAT
AACGTGTTTTGTTTTGTTTTTAAATTAGAAAAATAAGGAATTGCAGTGTGATTTTCTTTCCCCCTTTAACTTAG
AGGAACGAGGATTATACAGAAATTTGAAATTTCAACAAGAAAACTTAAGCTTCCTTGGATTCCCACGTCAAAGG
AAAGTTTCAAGCTTTTCAAGAGGAGTTCTCACTCGAAGATAAAGAACAGCTCGCTAACCACGAAAGAGGAATCGAT
GCTCAGCTTTTATGTTGCACTTCCTAAAGTTGCAGAATTAAGACAAATCTTTGAACCAAGAAAGAAAGAAATCTTA
GAAATGAAAAGAAAAGAAAGAAATTGCCAGGCGCCTGGAAGGGATTGAAAATGACACTCAGCCCATCTCTTGCAG
AGCTGCACAGGATTGGTGACTACCGCCTGCTGGAGGAAGACACCCCTCGATACATGAGAGCCAGCGACCCCTGCC
AGCCCCACATCGGCCGATCAAATGAAGAGGAGGAACTTCTGATTCTTCTCTAGAAAAGCAAACTCGATCCAAA
TACTGCACAGAAACCTCCGGTGTCCACGGTGACTCACCTATGGTTCCGGGTACCATGGACACCCACAGTCTGGAG
TCCAAAGCCGAAAGAATTGCAAGGTACAAGCAGAAAGAAGGCGACAGCTGGCAGAGAAGTATGGGCTGACTCTG
GATCCCAGGCGGACTCCGAGTATTTATCCCGCTATACCAAGTCCAGGAAGGAGCCTGATGCTGTGAGAAGCGG
GGAGGAAAAAGTGACAAACAGGAAGAGTCAAGCAGAGATGCTAGTTCTCTGTACCCCGGGACCGAGACGATGGGG
CTCAGGACCTGTGCCGGTGAATCCAAGGACTATGCCCTCCATGTGGGTGACGGCTCTTCCGACCCGGAGGTGCTG
CTGAACATAGAAAACCAAAGACGAGGTCAAGAGCTGAGTGCCACCCGCGCAGGCCCATGACCTGTCCCCAGCAGCC
GAGAGTTCTTCGACCTTCTCTTTCTCTGGGCGAGACTCCTCCTTCACTGAAGTGCCACGGTCCCCAAGCAGCC
CACAGCTCCTCCTGTCAGCAGGCAGCCTCCCGGAGCCCTCCTTTGGTGACCCACAGCTATCCCTGAGGCCCCGA
CCCAGTACAGGGAACCCAAACATGAGTGGTTTCTCCAGAAAGATTCCGAAGGGGACACACCTTCACTTATCAAC
TGGCCTTCCAGAGTTAAAGTTAGAGAAAAATTGGTGAAGAGGAAAGTGCTCGAAACAGCCCTGAAGTCCGCTCA
GAGTCCGTAAGTCAAGAGAGACACCAGCCAGCGCCAGTCCATTACGTGTCAATTCAGTCTGAGCACTCAGCCTTT
GATAGGGTCCCCAGCAAGGCAGCAGGCTCTACACGACAGCCAATCCGTGGCTATGTCCAACCCGAGATACCGGT
CACACCGCCAAGCTAGTGACGCCAGAAACCCAGAAAATGCATCTGAGTGTAGCTGGGTAGCATCAGCCACCCAG
AATGTCCCCAAACCTCCCAGCTTGACGGTTCTAGAAGGTGACGGAAGGGATAGCCAGTTCTCCATGTCTGCGAG
TCAAAAGCAGAAGAAGAAGAAGGGGAAGGAAGAGGAGAAGAAAAAGAAGATGTGTGCTTCACTGAAGCTCTC
GAGCAAAGCAAGAAAACCTACTGGCTTTGGAGGGTGATGGGCTAGTGAGAAGCCCAGAAGATCCCTCTAGAAAT
GAGGACTTTGGTAAGCCTGCTGTGAGCACAGTCACCTTAGAGCATCAGAAGGAACCTGGAACAGTGGCACAACCC
CCTCAAGCTCCGCACCAGCCCACTGAGAGGACAGGCAGGAGCGAGATGGTTCTCTACATTCAAAGTGAGCCTGTG
TCCCAAGACGCCAAACCAACTGGTCACAACAGGGAAGCCTCGAAAAGCGCAAGGTCCGTACCCGCTCTCTGTCA
GATTTACAGGCCCCCCCTCAGCTCCAGGCCTTGAAGTATAAGGACCCAGCTTCCAGGAGAGAGCTGGAGCTGCCC
AGCTCCAAGACCGAAGGGCCTTATGGGGAGATCAGCATGCTGGACACAAAAGTCTCTGTGCCCCAGCTCCGAAGT
GCGTTTCTGGCATCTGCCAACGCCTGCAGGAGACCTGAAGTCAAATCACGGGTGGAGAGGTCCGGCTGAAGGACCT
GGCTTGCCACCGGTGTGGAACGGGAGAGAGGGTCCCGGAAACCAAGACGCTATTTTTCTCCTGGTGAAGTAGA
AAAACCTTCCGAGAGATTTAGAACCCAACTATAACTTCAGCAGAACGAAAGGAATCGGATAGGTGCACTTCACAT
TCAGAAACGCCAACTGTGATGATGAAGAAAAGGTGGATGAACGAGCCAAGCTGAGCGTCGCCGCAAGAGGTTG
CTTTTCAGGGAGATGGAATAATCTTTTGATGAACAAATGTTCCAAAGCGACGCTCAAGAAACACAGCTGTGGAG
CAGAGGCTACGCCGTCTGCAGGACAGGTCCCTCACCCAGCCCATCACCCTGAAGAGGTGGTCATCGCAGCCACT
GAACCTATCCCCGCTTCGTGTTCTGGGGGACCCACCCTGTAATGGCGAGACTTCTAGCCCCACTGTAGCTAGG
AGCGCTGTGCAGCCTGCCAGATTGCAGGCCTCTGCTCACCAAAGGCCTTAGCCAAGGACCAGACAAATGAGGGC
AAAGAGCTTGCTGAGCAAGGAGAACCTGATTCTCCTCACTCTAAGCTTGGCCGAAAAGTTGGCCTTGTTTAAACAA
TTGTCCCAGCCAGTCTCAAAGCGATTTCTACCCGGAACAGAATAGACACGAGACAGAGGAGAATGAACGCTCGC
TATCAAACCTCAGCCAGTCACACTGGGAGAGGTGGAGCAGGTGCAGAGTGGAAGCTCATTCTTCTCACCTGCC
GTGAACACATCAGTGTCTACCGTAGCATCCACGGTTGCTCCAATGTATGCCGAGATCTTCGCACAAAGCCACCT
CTTGACCACAATGCAAGTGCCACTGACTATAAGTTTTCTTCTTCAATAGAAAATTCGGACTCTCCAGTTAGAAGC
ATTCTGAAATCGCAAGCTTGGCAGCCTTTGGTAGAGGGTAGCGAGAACAAAGGAATGTTGAGAGAATATGGAGAG

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FIGURE 2913B

ACAGAAAGCAAGAGAGCTTTGACAGGTCGAGACAGTGGGATGGAGAAGTATGGGTCCCTTTGAGGAAGCAGAAGCA
TCCTACCCCATCCTGAACCGAGCCAGGGAAGGAGACAGCCATAAGGAATCTAAATATGCTGTTCCAGAAAGAGGA
AGCCTGGAACGGGCGAACCCTCCCATCACCCACCTCGGGGATGAACCGAAGGAATTTTCCATGGCTAAAATGAAT
GCACAAGGAACTTGGACTTGAGGGACAGGCTGCCCTTTGAAGAGAAGGTGGAGGTGGAGAATGTTATGAAAAGG
AAGTTTTCTACTAAGAGCGGCAGAGTTCGGGGAGCCCACTTCCGAGCAGACGGGGACAGCTGCTGGGAAAACCTATT
GCTCAAACCACAGCCCCCGTGTCTGGAAGCCCCAGGATTCTTCGGAACAGCCACAGGAGAAGCTCTGCAAGAAT
CCATGTGCGATGTTTGCTGCTGGAGAGATCAAAACGCCGACAGGGGAGGGCCTTCTTGACTCACCCAGCAAAACC
ATGTCTATTAAAGAAAGATTGGCACTGTTGAAGAAAAGCGGGGAGGAAGATTGGAGAAAACAGACTCAGCAGGAGG
CAGGAGGGCGGCAAGGCGCCGGCCAGCAGCCTGCACACCAGGAAGCAGGGCGGTCCCTCATCAAGAAGCGGGTC
ACAGAAAGTCGAGAGAGCCAAATGACGATTGAGGAGAGGAAGCAGCTCATCACTGTGAGAGAGGAGGCCTGGAAG
ACGAGAGGCAGAGGAGCGGCCAACGACTCGACCCAGTTCACCTGTGGCTGGCAGGATGGTGAAGAAAGGTTTGGCG
TCACCTACTGCCATAACCCCACTAGCCTCACCCATTTGCGGTAAAACAAGAGGCACCACACCCGTTTCCAAACCC
CTGGAAGATATCGAAGCCAGACCAGATATGCAGTTAGAATCGGACCTGAAGTTGGACAGGCTGGAAACCTTTCTA
AGAAGGCTGAATAACAAAGTTGGCGGGATGCACGAAACGGTGTCTCACTGTCACCGGCAAATCTGTGAAGGAGGTG
ATGAAGCCAGATGATGATGAAACCTTTGCCAAATTTTACCGCAGCGTGGATTATAATATGCCAAGAAGTCCTGTG
GAGATGGATGAGGACTTCGATGTCAATTTTCGATCCTTATGCACCCAAATTGACGTCTTCCGTGGCCGAGCACAAG
CGGGCAGTTAGGCCCAAGCGCCGGGTTTCAAGCCTCCAAAACCCCTGAAATGCTGGCGGCAAGAGAAGATCTC
CTTCAGGAATACACTGAGCAGAGATTAACGTTGCCCTTCATGGAGTCAAAGCGGATGAAAGTAGAAAAGATGTCT
TCCAACCTCAACTTCTCAGAAGTCACCTTGGCGGGTTTAGCCAGTAAAGAAAACCTCAGCAACGTCAGCCTGCGG
AGCGTCAACCTGACGGAACAGAACTCTAACAACAGCGCCGTGCCCTACAAGAGGCTGATGCTGTTGCAGATTAAA
GGAAGAAGACATGTGCAGACCAGGCTGGTGAACCTCGAGCTTCGGCGCTCAACAGTGGGACTGCTTCTCTCTG
CTCTCTCCCCACTGCTGCTTCTGTGGGTAGGAGAGTTTGCAAACGTCATAGAAAAGGCGAAGGCCTCAGAACCT
GCAACTTTAATTCAGACAAAGAGGGAACCTTGGTTGTAGAGCTACTTATATCCAACCATGAGAAGGAATTAAT
ACACACACTCATGCAGCCAAAGACTTCTGGAAGCTTCTGGGTGGCCAAACCAGTTACCAATCTGCTGGAGACCCA
AAAGAAGATGAACCTCTATGAAGCAGCCATAATAGAACTAACTGCATTTACCGTCTCATGGATGACAAAACCTTGT
CCTGATGACGACTACTGGGGGAAAATTCCGAAGTCTCCTTCTGCAACCCAAAGAGGTACTGGTGTGTTGATTTT
GGTAGTGAAGTTTACGTATGGCATGGGAAAGAAGTCACATTAGCACAAACGAAAATAGCATTTTCAGCTGGCAAG
CACTTATGGAATGGAACCTTTGACTATGAGAACTGTGACATCAATCCCCTGGATCCTGGAGAATGCAATCCGCTT
ATCCCCAGAAAAGGACAGGGGCGGCCGACTGGGCGATATTTGGGAGACTTACTGAACACAATGAGACGATTTTG
TTCAAAGAGAAGTTTCTGGATTGGACGGAAGTGAAGAGATCGAATGAGAAGAACCCCGGGGAACTTGCCAGCAC
AAGGAAGACCCCAGGACTGATGTCAAGGCATACGATGTGACACGGATGGTGTCCATGCCCCAGACGACAGCAGGC
ACCATCCTGGACGGAGTGAACGTGGGCCGTGGCTATGGCCTGGTGAAGGACACGACAGGAGGCAGTTTGGAGTC
ACCAGCGTTTCCGTGGATGTCTGGCACATCCTGGAATTCGACTATAGCAGGCTCCCCAAACAAAGCATCGGGCAG
TTCCATGAGGGGGATGCCTATGTGGTCAAGTGAAGTTTCAATGGTGAACGGCAGTGGGAAGTCGCCAGAAAGGA
GAGCACTCGGTGAGGGCAGCCGGCAAAGAGAAGTGCCTTACTTCTTCTGGCAAGGCCGGCACTCCACCGTGAGT
GAGAAGGGCACGTGGCGCTGATGACGGTGGAGCTGGACGAGGAAAGGGGGGCCAGGTCCAGGTTCTCCAGGGA
AAGGAGCCCCCTGTTTCTGCAAGTGTTCAGGGGGGGATGGTGGTGCCTCGGGGAGGCGGGAAGAGGAAGAA
GAAAATGTGCAAAGTGAGTGGCGGCTGTACTGCGTGCCTGGAGAGGTGCCCGTGAAGGGAATTTGCTGGAAGTG
GCCTGTCACTGTAGCAGCCTGAGGTCCAGAACTTCCATGGTGGTGTCTTACGTCAACAAGGCCCTCATCTACCTG
TGGCACGGATGCAAAGCCCAGGCCACACGAAGGAGGTGGAAGGACCGCTGCGAACAAGATCAAGGAACAATGT
CCCCTGGAAGCAGGACTGCATAGTAGCAGCAAAGTCACAATACACGAGTGTGATGAAGGCTCCGAGCCACTCGGA
TTCTGGGATGCCTTAGGAAGGAGAGACAGGAAAGCCTACGATTGCATGCTTCAAGATCTGGAAGTTTAACTTC
GCGCCCCGCTGTTTCATCCTCAGCAGCTCCTCTGGGGATTTTGACGCCACAGAGTTTGTGTACCCTGCCGAGCC
CCCTCTGTGGTCAGTTCCATGCCCTTCTCTGCAGGAAGATCTGTACAGCGCGCCCCAGCCAGCACTTTTCTTGT
GACAATCACACGAGGTGTACCTCTGGCAAGGCTGGTGGCCCATCGAGAACAAGATCACTGGTTCCGCCCCGATC
CGCTGGGCCTCCGACCGGAAGAGTGCATGGAGACTGTGCTCCAGTACTGCAAAGGAAAAAATCTCAAGAAACCA
GCCCCAAGTCTTACCTTATCCACGCTGGTCTGGAGCCCTGACATTACCAATATGTTTCCAGCTGGGAGCAC
AGAGAGGACATCGCTGAGATCACAGAGATGGACACGGAAGTTTCCAATCAGATCACCTCGTGGGAAGACGTCTTA

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FIGURE 2913C

GCCAAGCTCTGTAAAACCATTTACCCGCTGGCCGACCTCCTGGCCAGGCCACTCCCGGAGGGGGTCGATCCTCTG
AAGCTTGAGATCTATCTCACCGACGAAGACTTCGAGTTTGCACTAGACATGACGAGGGATGAATACAACGCCCTG
CCCGCCTGGAAGCAGGTGAACCTGAAGAAAGCAAAAGGCCTGTTCTGAGTGGGGAGACGCCAGAGGAGCCTCACG
GTCACGTCCAACAACACCACTGCACCAGGGAAATGGATATATATTTTTGGACTGGTGTTTTTTACAAAAGTATTTT
TCAATCAGAGTTTTTCAGAACCTGACATTGTTAAAGATACTGCTTGTCCTCCGGAGTTGTGTATTTTGTAAATGTTCA
AGGGAACGTGTTTGGAACCTTCTTTCCACCATTTCAGGAGGTTATCAGAATTAATAAAAAGTATCTGTTATGTGCACT
TAAGCCGCAGCTGCTATAGATAGCACTGCCTTCTTGTTCCAGCTAGGCAATGCCTTTTTTTTTTTTTTTTGAAGC
AGTTCTCTTTATAAAAGTGTTATTTTGATAGTTTGTTGATTCTAAAATATATATATATTTTATATAAACACCATATA
AGTCAAATATGTATTTAACAAGCAATATGTATTCATTCACTTTCAAGATTGTTTTGGTGTCAAAATAACATGA
AAAGGTAGATGGAGTTGCTTCTGTTGAATTAGCTCTGCCACCAATATGTATCTTCATACACGTTTGGAATGTTT
CCTGCAGCATTAGGTATGACTTGTTCTGAGTACTGCTTCCGGTGCTAAAATGAACAAAGAATTTGTACTTAATGG
CATGGACTCTGGAGAATCTATGCGAATCAACCTTTCTACCTTAATATCTCCCCAAAAATGTATAGTGCCTTGTTT
TTATGTACAGTTTATATACAGAAAAGTTTGCTCTGCATTTTTGATGATGGTTTGGAACATTATCTACAATTTTAC
TCTCAAATAGTCAAATAAAAACATCTCAATTTCTAATACCGGTTGTAAACAGTACACATGTCATTTTGTGATAT
AGGACTCCCAAATAAAAGTATCAGAATAAACACAACAATTAACGGT

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FIGURE 2914

CAGACGCTGCTGCCGAGGAAAACCTTGTATTATTAGGCATGGTCAACCCACCGTGTTCTTCGACATTGCCATCG
ACGGCGAGCCCTTGGGCCGCGTCTCCTTTTAGCTGTTTGCAGACAAGTCCCAAAGACAGCAGAAAATTTTCGTG
CTCTGAGCACTGGAGAGAAAGGATTTAGTTATAAGGGTTCCTGCTTTCACAGAATTATTCCAGGGTTTATGTATC
AGGGTCGTGACTTCACACGCCATAATGGCACTGGTGGCAAGTCCATCTATGGGGAGAAAATTTGAAGATGAGAACT
TCATCCTAAAGCATAACAGGTCCTGGCATCTTGTCCATGGCAAATGCTGGACCAACACAAATGGTTCCCAGTTTT
TCATCTGCACTGCCAAGACTGAGTGGTTGGATGGCAAGCATGTGGTCTTGGCAAAGTGAAAGAAGGCATGAATA
TTATGGAGGCCATGGAGCGCTTTGGGTCCAGGAATGGCAAGACCAGCAAGAAGATCACCATTGCTGACTGTGGAC
AACTCGAATAAGTTTGACTTGTGTTTTATCTTAACCACCAGACCATTCCTTCTGTAGTTCAGGAGAACACCCCTTC
CACCCCATTTGCTCGCAGTATCCTAGAATCTTTGTGCTCTTGCTGCAGTTCATGTTTTCTTGTTCCTCCCAT
GCCTAGCTGGATTGCAGAGTTAAGTTTATGATTATGAAATAAAAACCAATAACAA

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FIGURE 2915

GQPHRVLRHCHRRRALGPRLLLALFADKFPKTAENFRALSTGEKGF SYKGSCFHRIIPGFMYQGRDFTRHNGTGG
KSIYGEKFEDENFILKHTGPGILSMANAGPNTNGSQFFICTAKTEWLDGKHVVFGKVKEGMNIMEAMERFGSRNG
KTSKKITIADCGQLE

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FIGURE 2916A

ATGAAAGTGACCGTGTGCTTCGGACGGACCCGGGTGGTCGTGCCGTGCGGGGACGGCCACATGAAAGTTTTTCAGC
CTCATCCAGCAGGCGGTGACCCGCTACCGGAAGGCCATCGCCAAGGATCCAACTACTGGATACAGGTGCATCGC
TTGGAACATGGAGATGGAGGAATACTAGACCTTGATGACATTCTTTGTGATGTAGCAGACGATAAAGACAGACTG
GTAGCAGTGTGTTGATGAGCAGGATCCACATCACGGAGGTGATGGCACCAGTGCCAGTTCCACGGGTACCCAGAGC
CCAGAGATATTTGGTAGTGAGCTTGGCACCAACAATGTCTCAGCCTTTCAGCCTTACCAAGCAACAAGTGAAATT
GAGGTCACACCTTCAGTCCTTCGAGCAAATATGCCTCTTCATGTTTCGACGCAGTAGTGACCCAGCTCTAATTGGC
CTCTCCACTTCTGTGAGTGATAGTAATTTTTCTCTGAAGAGCCTTCAAGGAAAAATCCCACACGCTGGTCAACA
ACAGCTGGCTTCTCAAGCAGAACACTGCTGGGAGTCTTAAACCTGCGACAGGAAGAAAGATGAAAACTACAGA
AGCCTCCCGCGGGATACTAGTAACCTGGTCTAACCAATTTTCAGAGAGACAATGCTCGCTCGTCTCTGAGTGCCAGT
CACCCAATGGTGGGCAAGTGGCTGGAGAAACAAGAACAGGATGAGGATGGGACAGAAGAGGATAACAGTCGTGTT
GAACCTGTTGGACATGCTGACACGGGTTTGGAGCATATACCCAACCTTTCTCTGGATGATATGGTAAAGCTCGTA
GAAGTCCCCAACGATGGAGGGCTCTGGGAATCCATGTAGTGCCTTTTCAGTGCTCGAGGCGGCAGAACCTGGGG
TTATTAGTAAACGATTGGAGAAAGGTGGTAAAGCTGAACATGAAATCTTTTCGTGAGAATGATTGCATTGTC
AGGATTAATGATGGCGACCTTCGAAATAGAAGATTTGAACAAGCACAAACATATGTTTCGCCAAGCCATGCGTACA
CCCATCATTTGGTTCCATGTGGTTTCTGACGAAATAAAGAGCAGTATGAACAACCTATCCCAAAGTGAGAAGAAC
AATTACTATTCAAGCCGTTTTAGCCCTGACAGCCAGTATATTGACAACAGGAGTGTGAACAGTGCAGGGCTTCAC
ACGGTGCAGAGAGCACCCCGACTGAACCACCCGCTGAGCAGATAGACTCTCACTCAAGACTACCTCATAGCGCA
CACCCCTCGGGAAAAACCACCATCCGCTCCAGCCTCGGCACCTCAGAATGTATTTAGTACGACTGTAAGCAGTGGT
TATAACACCAAAAAAATAGGCAAGAGGCTTAATATCCAGCTTAAGAAAGGTACAGAAGGTTTGGGATTGAGCATC
ACTTCCAGAGATGTAACAATAGGTGGCTCAGCTCCAATCTATGTGAAAAACATTTCTCCCCGGGGGGCGGCCATT
CAGGATGGCCGACTTAAGGCAGGAGACAGACTTATAGAGGTAAATGGAGTAGATTTAGTGGGCAATCCCAAGAG
GAAGTTGTTTCGTGTTGAGAAGCACCAAGATGGAAGGAAGTGTGAGCCTTCTGGTCTTTTCGCCAGGAAGACGCC
TTCCACCAAGGGAAGTGAATGCAGAGCCAAGCCAGATGCAGATTCCAAAAGAAACGAAAGCAGAAGATGAGGAT
ATTGTTCTTACACCTGATGGCACCAGGGAATTTCTGACATTTGAAGTCCCACTTAATGATTTCAGGATCTGCAGGC
CTTGGTGTGAGTGTCAAAGGTAACCGGTCAAAAGAGAACCACGCAGATTTGGGAATCTTTGTCAAGTCCATTATT
AATGGAGGAGCAGCATCTAAAGATGGAAGGCTTCGGGTGAATGATCAACTGATAGCAGTAAATGGAGAATCCCTG
TTGGGCAAGACAAACCAAGATGCCATGGAAACCTAAGAAGGTCTATGTCTACTGAAGGCAATAAACGAGGAATG
ATCCAGCTTATTGTTGCAAGGAGAATAAGCAAGTGCAATGAGCTGAAGTCACCTGGGAGCCCCCTGGACCTGAG
CTGCCATTGAAACAGCGTTGGATGATAGAGAACGAAGAATTTCCCATTCCTCTACAGTGGGATTGAGGGGCTT
GATGAATCCCCCAGCAGAAATGCTGCCCTCAGTAGGATAATGGGTGAGTCAGGTAAATACCAGCTGTCCCCCTACA
GTGAATATGCCCCAAGATGACACTGTCTATTAGAAAGATGACAGGTGTCAGTGCTTCTCCACATCTCTCTGAC
CAGTCTCTTCCAGCTCCCATGATGATGTGGGGTTTGTGACGGCAGATGCTGGTACTTGGGCCAAGGCTGCAATC
AGTGATTGACCGACTGCTCTTTGAGTCCAGATGTTGATCCAGTTCCTTGCTTTTCAACGAGAAGGATTTGGACGT
CAGAGTATGTCAGAAAAACGCACAAAGCAATTTTCAGATGCCAGTCAATTGGATTTGTTTAAACACGAAAATCA
AAAAGCATGGATTTAGGTATAGCTGACGAGACTAACTCAATACAGTGGATGACCAGAAAGCAGGTTCTCCCAGC
AGAGATGTGGGTCTTCCCTGGGTCTGAAGAAGTCAAGCTCGTTGGAGAGTCTGCAGACCGCAGTTGCCGAGGTG
ACTTTGAATGGGGATATTCCCTTCCATCGTCCACGGCCGCGGATAATCAGAGGCAGGGGATGCAATGAGAGCTTC
AGAGCTGCCATCGACAAATCTTATGATAAACC CGGGTAGATGATGATGATGAAGGCATGGAGACCTTGGAAGAA
GACACAGAAGAAAGTTCAAGATCAGGGAGAGAGTCTGTATCCACAGCCAGTGATCAGCCTTCCCACTCTCTGGAG
AGACAAATGAATGGAAACCAAGAGAAAGGTGATAAGACTGATAGAAAAAAGGATAAACTGGAAAAAGAAAGAA
AAAGATAGAGATAAGGAGAAGGATAAAATGAAAGCCAAGAAGGAATGCTGAAGGGCTTGGGAGACATGTTTCAGG
TTTGGCAAACATCGAAAAGATGACAAGATTGAGAAAACGGGTAAAAATAAAAAATACAGGAATCCTTTACATCAGAA
GAGGAGAGGATACGAATGAAGCAGGAGCAGGAGAGGATTCAAGCCAAACTCGAGAATTTAGGGAACGACAAGCT
CGAGAGCGTGACTATGCTGAAATTCAAGATTTTCATCGGACATTTGGCTGTGATGATGAGTTAATGTATGGGGGA
GTTTCTTCTTATGAAGTTCCATGGCTCTCAACGCTAGACCTCAGAGCCACGAGAAGGGCATATGATGGATGCT
TTGTATGCCAAGTCAAGAAGCCGCGGAATTTCCAAACCTCACCTGTAGACAGTAACAGATCAACTCCTAGCAAT
CATGATCGGATACAGCGTCTGAGGCAAGAAATTTTCAGCAAGCAAAAGCAAGATGAAGATGTAGAAGATCGTCGGCGG
ACCTATAGTTTTGAGCAACCTTGCCGAACGCACGSCCGGCGACGCAGAGCGGGCGACACTCGGTGTCCGTGGAG

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FIGURE 2916B

GTGCAGATGCAGCGGCAGCGGCAGGAGGAGCGCGAGAGCTCCCAGCAGGCCAGCGCCAGTACAGCTCTCTGCCT
CGGCAAAGCAGGAAAAATGCCAGCTCGGTCTCCCAGGACTCTTGAGGAGCAGAACTACTCCCCTGGGGAAGGCTTC
CAGAGTGCCAAAGAGAACCCAGGTACTCCAGCTACCAAGGCTCCAGGAACGGCTACCTGGGAGGACATGGCTTC
AACGCCAGGGTCATGCTGGAACTCAGGAGCTCCTTCGCCAGGAACAGAGGCGGAAGGAGCAGCAGATGAAGAAG
CAGCCTCCTTCCGAGGGGGCCAGCAACTATGACTCGTATAAGAAAGTCCAGGACCCAGTTACGCCCCCTCCAAG
GGGCCCTTCCGGCAAGATGTGCCCCCTCCCCTTCTCAGGTTGCGAGGCTGAACAGACTTCAGACTCCTGAGAAA
GGGAGGCCCTTCTATTCCTGA

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FIGURE 2917

MKVTVCFGRTRVVVPCGDGHMKVFSLIQQAVTRYRKAIAKDPNYWIQVHRLEHGDGGILDLDLDDILCDVADDKDRL
VAVFDEQDPHHGGDGTSSASTGTQSPEIFGSELGTNNVSASFQPYQATSEIEVTPSVLRANMPLHVRRSSDPALIG
LSTSVSDSNFSSEEPSRKNPTRWSTTAGFLKQNTAGSPKTCDRKKDENYRSLPRDTSNWSNQFQRDNARSSLSAS
HPMVGKWLEKQEDEDGTEEDNSRVEPVGHADTGLEHIPNFSLDDMVKLVEVPNDGGPLGIHVVPF SARGGRTL
LLVKRLEKGGKAEHENLFREND CIVRINDGDLNRNRFEQAQHMFQAMRTP I IWFHVVPAANKEQYEQLSQSEKN
NYYSSRFSPDSQYIDNRSVNSAGLHTVQRAPRLNHPPEQIDSHSRLPHSAHP SGKPPSAPASAPQNVFSTTVSSG
YNTKKIGKRLNIQLKKGTEGLGFSITSRDVTIGGSAPIYVKNILPRGAAIQDGRKAGDRLIEVNGVDLVGKSQE
EVSLLRSTKMEGTVSLLVFRQEDAFHPRELNAEPSQM QIPKETKAEDEDIVLTPDGTREFLTTFEVPLNDSGSAG
LGVSVKGNRSKENHADLGIFVKSIINGGAASKDGRLRVNDQLIAVNGESLLGKTNDAMETLRRSMSTEGNKRGM
IQLIVARRISKCNELKSPGSPPGPELP IETALDDRERRISHSLYSGIEGLDESPSRNAALSRI MGESGKYQLSPT
VNMPQDDTVI IEDDRLPVLPPLSDQSSSSSHDDVGFVTADAGTWAKAAISDSADCSLSPDVPVLAFOREGFGR
QSMSEKRTKQFSDASQLDFVKTRKSKSMDLGIADETKLNTVDDQKAGSPSRDVGPSLGLKKSSSLESLOTAVAEV
TLNGDIPFHRPRPRIIRGRGCNESFRAAIDKSYDKPAVDDDDDEGMETLEEDTEESSRSGRESVSTASDQPSHSLE
RQMNGNQEKGDKTDRKKDKTGKEKKKDRDKEKDKMKAKKGMKGLGDMFRFGKHKRDKDKIEKTGKIKIQESFTSE
EERIRMKQEQUERIQAKTREFRERQARERDYAEIQDFHRTFGCDELMYGGVSSYEGSMALNARPQSPREGHMMDA
LYAQVKKPRNSKPSPVDSNRSTPSNHDRIQRLRQEFQQAQDEDEDVDRRTYSFEQPWP NARPATQSGRHSVSVE
VQMQRQRQEERESSQAQRQYSSLPRQSRKNASSVSQDSWEQNYSPGEGFQSAKENPRYSSYQGSRNGLGGHGF
NARVMLETQELLRQEQRKEQQMKKQPPSEGPSNYDSYKKVQDPSYAPPKGPFRRQDVPPSPSQVARLNRLQTPEK
GRPFYS

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FIGURE 2918

CTATTCTGAAACGTGTTTTGCCCGAGGCCTGGGGTGCAGGCACCGCTGTACCTGGGGTGAGGGGAGCTGCCGGGC
CTTTCAGCCCGGTGGTCTCCACGATGCTCCCATCTGTGTGGACGACAATCAGTGTGCTTTTTCGGTGTTTCAGGC
TGTCCTCCGATCTGAAGGGCGTCTTACCAGACTAGAAGGAAAAACCGCTCCCTGGGCGTCTCCAGCAGGGCTC
TCTGGCTGTTCTACCAAGAAGGGACGCTCACCTAGGCACCCCATATCTTTCCAAAGATACCTCTCAAAGACTT
GAAAACAGAGCCAAGAACAAGAACAGACAATGCCGAAGTCTGTGTGGTGCTGAGGAAAATGCTTGCCATCATTG
TCAAAGGGAAGGAAGAAAGGTGCTCCACAAACAAGAAACACCCCTCCCTTCCACCTGAGCCGCTCCACAAAGGTCA
CCGTCTTCATGCAGAGTTTCCAACAGACCGAGTTGGCCGCCACAGACAAGGCCTTGTCAGGACCGCCCTCCAGA
CCTCCTTACAGATGGCAACTGGAGACCAGGGCCTCAAAACCACATTTCCACACTGGCTGAAGCTGCTGCAACTGC
TGCTTGCTTCCAAAATCAGCCTTCAGGCGGCACAGACCCCGCCACAGGAAGCCAGAGTCTCCATGCCCCACACACC
ACTGCTGGAACCTGAACCCTACCTTGGCCAAGTCATCCGGCAAACCTCTGGCCTGCAGGCTCTGTTACCCCCACGG
CCCAGCTGCTTTGCCGCCGAGTCCGAGTCTCCATCCGGACTCCGCCGAGCCTTCCCGAAGGCGCCGTCCGGGAC
CGCCCGAAGCGCCGGCCAGCGACCAGAAGGCCCAAAGCGTGTATCCAAGCCGGCTTTCGCTGGGCACAACCC
TAGTGGGAGCGGTGGGGACAGAGCCAGCTCGGCCAGACGGTCGGCAGGCCCCAGGAGGGCCATGAGTCAGAGGGC
AAGGCTGAACTGGATTTGGAGATCTTAGCCCAGGCTGACGGAGGCTCCCAAGAAGGGGGAGCAGGCCACACTCA
GCACCCTGCGTGGGAGGGGCACCTGACCGCCAGATGGGCGGTCCACCTGAGCCGCACCCCTGGAGGGGCCTTTGG
TGCCCTCTGCCGGCCGCTCCATGTGCTGCCTTGGAAGCAAGTACTCCACTTACTTTGGCTTTTGAAGTATTTC
CCTAGCCATCGACGAGTACAAGCCCCAGGATGCTACCACCAACCCGTCCCTGATCCTGGCCGCAGCACAGATGCC
CGCTTACCAGGAGCTGGTGGAGGAGGCGATTGCCTATGGCCGGAAGCTGGGCGGCACCTTGTCTACAGCTTGAC
ACAGCAAGAATATTCTGTTCCTTAACGCATTTCCAGGACCGTGGCCAATGGCAGACACCAGGTCATTAAACCC
AGTCACAGCTGAATGA

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FIGURE 2919A

AGCCGCCGCCACCCGCCGCCGCCGACACCCGGGAGGCCCGCCAGCCCGCGGGAGAGGCCAGCGGGAGTTCGCGG
AACAGCAGGCCCGAGCCACCCGCCGCCGGGCCCGGACGCCGCCGAAAAAGATGAATTTACAACCAATTTTCTGG
ATTGGACTGATCAGTTTCAGTTTGTGTGTGTTGCTCAAACAGATGAAAATAGATGTTTAAAAGCAAATGCCAAA
TCATGTGGAGAATGTATACAAGCAGGGCCAAATTGTGGTGGTGCACAAATTCACATTTTACAGGAAGGAATG
CCTACTTCTGCACGATGTGATGATTTAGAAGCCTTAAAAAGAAGGGTTGCCCTCCAGATGACATAGAAAATCCC
AGAGGCTCCAAAGATATAAAGAAAAATAAAATGTAAACCAACCGTAGCAAAGGAACAGCAGAGAAGCTCAAGCCA
GAGGATATTACTCAGATCCAACCACAGCAGTTGGTTTTGCGATTAAAGATCAGGGGAGCCACAGACATTTACATTA
AAATTCAAGAGAGCTGAAGACTATCCATTGACCTCTACTACCTTATGGACCTGTCTTACTCAATGAAAGACGAT
TTGGAGAATGTAAAAAGTCTTGGAACAGATCTGATGAATGAAATGAGGAGGATTACTTCGGACTTCAGAATTGGA
TTTGGCTCATTGTGGAAAAGACTGTGATGCCCTTACATTAGCACAAACACCAGCTAAGCTCAGGAACCCCTTGACA
AGTGAACAGAAGTGCACCAGCCATTTAGCTACAAAAATGTGCTCAGTCTTACTAATAAAGGAGAAGTATTTAAT
GAACTTGTGGAAAACAGCGCATATCTGGAAATTTGGATTCTCCAGAAGGTGGTTTCGATGCCATCATGCAAGTT
GCAGTTTGTGGATCACTGATTGGCTGGAGGAATGTTACACGGCTGCTGGTGTTCACAGATGCCGGGTTTCAC
TTTGCTGGAGATGGGAACTTGGTGGCATTGTTTTACCAAATGATGGACAATGTCACCTGGAAAAATAATATGTAC
ACAATGAGCCATTATTATGATTATCCTTCTATTGCTCACCTTGTCAGAACTGAGTGAAAAATAATATTCAGACA
ATTTTTGCAGTTACTGAAGAATTTAGCCTGTTTACAAGGAGCTGAAAACTTGATCCCTAAGTCAGCAGTAGGA
ACATTATCTGCAATTTCTAGCAATGTAATTCAGTTGATCATTGATGCATACAATTCCTTTCTCAGAAGTCATT
TTGGAAAACGGCAAATTTGTCAGAAGGAGTAACAATAAGTTACAAATCTTACTGCAAGAACGGGGTGAATGGAACA
GGGGAATGGAAGAAAATGTTCCAATATTTCCATTGGAGATGAGGTTCAATTTGAAATTAGCATAACTTCAAAT
AAGTGTCCAAAAAGGATTCTGACAGCTTTAAATTAGGCCCTCGGGCTTTACGGAGGAAGTAGAGGTTATTCTT
CAGTACATCTGTGAATGTGAATGCCAAAGCGAAGGCATCCCTGAAAGTCCCAAGTGTCATGAAGGAAATGGGACA
TTTGAGTGTGGCGCGTGCAGGTGCAATGAAGGGCGTGTGGTAGACATTGTGAATGCAGCACAGATGAAGTTAAC
AGTGAAGACATGGATGCTTACTGCAGGAAGAAAACAGTTTCAAAATCTGCAGTAACAATGGAGAGTGCCTGCTGC
GGACAGTGTGTTGTAGGAAGAGGGATAATACAAATGAAATTTATTCTGGCAAATCTGCGAGTGTGATAATTTT
AACTGTGATAGATCCAATGGCTTAATTTGTGGAGGAAATGGTGTTCGAAAGTGTGCTGTGTGTGAGTGCAACCCC
AACTACACTGGCAGTGCATGTGACTGTTCTTTGGATACTAGTACTTGTGAAGCCAGCAACGGACAGATCTGCAAT
GGCCGGGGCATCTGCGAGTGTGGTGTCTGTAAGTGTACAGATCCGAAGTTTCAAGGGCAAACGTGTGAGATGTGT
CAGACCTGCCTTGGTGTCTGTGCTGAGCATAAAGAATGTGTTTCAAGTGCAGAGCCTTCAATAAAGGAGAAAAGAAA
GACACATGCACACAGGAATGTTCTATTTTAACTTACCAAGGTAGAAAAGTCGGGACAAATTACCCACAGCCGGTC
CAACCTGATCCTGTGTCCATTGTAAGGAGAAGGATGTTGACGACTGTTGGTCTATTTTACGTATTCAGTGAAT
GGGAACAACGAGGTGATGTTTCTGTTGTTGAGAAATCCAGAGTGTCCCACTGGTCCAGACATCATTTCCAATTGTA
GCTGGTGTGTTGCTGGAATTTGTTCTTATTGGCCTTGCACTTGTGATATGGAAGCTTTTAAATGATAATTCAT
GACAGAAGGGAGTTTGCTAAATTTGAAAAGGAGAAAATGAATGCCAAATGGGACACGGGTGAAAATCCTATTTAT
AAGAGTCCCATAACAAGTGTGGTCAATCCGAAGTATGAGGAAAAATGAGTACTGCCCCGTGCAATCCCAACAC
TGAATGCAAAGTAGCAATTTCCATAGTCACAGTTAGGTAGCTTTAGGGCAATATTGCCATGGTTTTTACTCATGTG
CAGGTTTTGAAAATGTACAATATGTATAATTTTTTAAATGTTTTATTATTTTGAATAATGTTGTAATTCATGC
CAGGGACTGACAAAAGACTTGAGACAGGATGGTTATTCTTGTGAGCTAAGGTCACATTGTGCCTTTTTGACCTTT
TCTTCTGGACTATTGAAATCAAGCTTATTGGATTAAAGTGATATTTCTATAGCGATTGAAAGGGCAATAGTTAAA
GTAATGAGCATGATGAGAGTTTCTGTTAATCATGTATTTAACTGATTTTTAGCTTTACAAATATGTCAGTTTGC
AGTTATGCAGAATCCAAAGTAAATGTCCTGCTAGCTAGTTAAGGATTGTTTTAAATCTGTTATTTTGTATTTGC
CTGTTAGACATGACTGATGACATATCTGAAAGACAAGTATGTTGAGAGTTGCTGGTGTAAAAATACGTTTGAAATA
GTTGATCTACAAAGGCCATGGGAAAAATTCAGAGAGTTAGGAAGGAAAAACCAATAGCTTTAAACCTGTGTGCC
ATTTTAAAGAGTTACTTAATGTTTGGTAACTTTTATGCCTTCACTTTACAAATTCAGCCTTAGATAAAAGAACCG
AGCAATTTTCTGCTAAAAAGTCCTTGATTTAGCACTATTTACATACAGGCCATACTTTACAAAGTATTTGCTGAA
TGGGGACCTTTTGAAGTTGAATTTATTTTATTATTTTATTTTGTGTTAATGTCTGGTGTCTTCTATCACCTCTTCT
AATCTTTTAAATGATTTGTTTGAATTTTGGGGTAAGACTTTTTTATGAGTACTTTTTCTTGAAGTTTTAGCGG
TCAATTTGCCTTTTTAAATGAACATGTGAAGTTATACTGTGGCTATGCAACAGCTCTCACCTACGCGAGTCTTACT
TTGAGTTAGTGCCATAACAGACCCTGTATGTTTACTTCTCACCATTGAGTTGCCCATCTGTGTTTCACTAGT

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FIGURE 2919B

CACATTCTTGTTTTAAGTGCCTTTAGTTTTAACAGTTCACTTTTTACAGTGCTATTTACTGAAGTTATTTATTAA
ATATGCCTAAAATACTTAAATCGGA

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FIGURE 2920

MNLQPIFWIGLISSVCCVFAQTDENRCLKANAKSCGECIQAGPNCGWCTNSTFLQEGMPTSARCDDEALKKKGC
PPDDIENPRGSKDIKKKNVTNRSKGTAEKLPEDITQIQPQQLVLRRLRSGEPQTFTLKFKRAEDYPIDLYYIMD
LSYSMKDDLENVKSLGTDLMNEMRRITSDFRIGFGSFEKTVMPYISTTPAKLRNPCTSEQNCTSPFSYKNVLSL
TNKGEVFNELVGKQRISGNLDSPEGGFDAIMQVAVCGSLIGWRNVTRLLVFSTDAGFHFAAGDGKLGIVLPNDGQ
CHLENNMYTMSHYDYPSIAHLVQKLSENNIQTIFAVTEEFQPVYKELKNLIPKSAVGTLNANSSNVIQLIIDAY
NSLSSEVILENGKLSEGVTSYKSYCKNGVNGTGNGRKCSNISIGDEVQFEISITSNKCCKDSDFSFKIRPLGF
TEEVEVILQYICECECQSEGIPEPKCHEGNGTFECGACRCNEGRVGRHCECSTDEVNSEDMDAYCRKENSSEIC
SNNGECVCGQCVCRKRDNTNEIYSGKFCECDNFNCDRSNGLICGGNGVCKCRVCECNPNYTGSAACDCSLDTSTCE
ASNGQICNGRGICECGVCKCTDPKFQGGTCEMCQTCLGVCAEHKECVQCRAFNKGEKKDTCTQECYFNITKVES
RDKLPQPVQPDVSHCKEKDVDDCWFYFTYSVNGNNEVMHVVENPECPTGPDIIPIVAGVVAGIVLIGLALLLI
WKLLMI IHDRREFAKFEKEKMNKWDGTGENPIYKSAVTTVVNPKYEGK

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FIGURE 2921A

GCTTCAGTCCCGCGACCGAAGCAGGGCGCGCAGCAGCGCTGAGTGCCCCGGAACGTGCGTCGCGCCCCCAGTGTC
CGTCGCGTCCGCCGCGCCCCGGGCGGGGATGGGGGGGCCAGACTGAGCGCCGCACCCGCCATCCAGACCCGCCGG
CCCTAGCCGCGAGTCCCTCCAGCCGTGGCCCCAGCGCGCACGGGCGATGGCGAAGGCGACGTCCGGTGCCGCGGGG
CTGCGTCTGCTGTTGCTGCTGCTGCTGCCGTGCTAGGCAAAGTGGCATTGGGCCCTCTACTTCTCGAGGGATGCT
TACTGGGAGAAGCTGTATGTGGACCAGGCAGCCGGCACGCCCTTGCTGTACGTCCATGCCCTGCGGGACGCCCT
GAGGAGGTGCCAGCTTCCGCTGGGCCAGCATCTCTACGGCACGTACCGCACACGGCTGCATGAGAACAACTGG
ATCTGCATCCAGGAGGACACCGGCCCTCTCTACCTTAACCGGAGCCTGGACCATAGCTCCTGGGAGAAGCTCAGT
GTCCGCAACCGCGGGCTTTCCCTGCTCACCGTCTACCTCAAGGTCTTCTGTACCCACATCCCTTCGTGAGGGC
GAGTGCCAGTGGCCAGGCTGTGCCCGGTATACTTCTCTTCTTCAACACCTCCTTTCCAGCCTGCAGCTCCCTC
AAGCCCCGGGAGCTCTGCTTCCCAGAGACAAGGCCCTCTTCCGCATTCCGGGAGAACCGACCCCCAGGCACCTTC
CACCAGTTCGGCTGCTGCTGTGAGTTCTTGTGCCCAACATCAGCGTGGCCTACAGGCTCCTGGAGGGTGAG
GGTCTGCCCTTCCGCTGCGCCCCGACAGCCTGGAGGTGAGCACGCGCTGGGCCCTGGACCGCGAGCAGCGGGAG
AAGTACGAGCTGGTGGCCGTGTGCACCGTGCACGCCGCGCGCGAGGAGGTGGTGATGGTGCCCTTCCCGGTG
ACCGTGTACGACGAGGACGACTCGGCGCCACCTTCCCCGCGGGCGTCGACACCGCCAGCGCCGTGGTGGAGTTC
AAGCGGAAGGAGGACACCGTGGTGGCCACGCTGCGTGTCTTCGATGCAGACGTGGTACCTGCATCAGGGGAGCTG
GTGAGGCGGTACACAAGCAGCTGCTCCCCGGGGACACCTGGGCCAGCAGACCTTCCGGGTGGAACACTGGCCC
AACGAGACCTCGGTCCAGGCCAACGGCAGCTTCGTGCGGGCGACCGTACATGACTATAGGCTGGTTCTCAACCGG
AACCTCTCCATCTCGGAGAACCACCATGCAGCTGGCGGTGCTGGTCAATGACTCAGACTTCCAGGGCCCCAGGA
GCGGGCGTCTCTTGTCTCACTTCAACGTGTGGTGTGCGCGTACGCTGCACCTGCCAGTACCTACTCCCTC
TCCGTGAGCAGGAGGGCTCGCCGATTGCGCCAGATCGGGAAAGTCTGTGTGGAAAAGTCCAGGCATTAGTGCG
ATCAACGTCCAGTACAAGCTGCATTCTCTGGTGCCAACTGCAGCACGCTAGGGGTGGTCACTCAGCCGAGGAC
ACCTCGGGGATCCTGTTTGTGAATGACACCAAGGCCCTGCGGCGGGCCAAAGTGTGCCGAACCTCACTACATGGTG
GTGGCCACCGACCAGCAGACCTCTAGGCAGGCCAGGCCAGCTGCTTGTAAACAGTGGAGGGGTGATATGTGGCC
GAGGAGGCGGGCTGCCCTGTCTGTGAGTCAAGAGACGGCTGGAGTGTGAGGAGTGTGGCGGCTGGGC
TCCCCAACAGGCAGGTGTGAGTGGAGGCAAGGAGATGGCAAAGGGATCACAGGAACCTTCTCCACCTGCTCTCC
AGCACCAAGACCTGCCCCGACGGCCACTGCGATGTTGTGGAGACCCAAGACATCAACATTTGCCCTCAGGACTGC
CTCCGGGGCAGCATTGTTGGGGGACACGAGCCTGGGGAGCCCCGGGGGATTAAAGCTGGCTATGGCACCTGCAAC
TGCTTCCCTGAGGAGGAGAAGTGCTTCTGCGAGCCCCGAAGACATCCAGGATCCACTGTGCGACGAGCTGTGCCG
ACGGTGATCGCAGCCGCTGTCTCTTCTCTTCTCATCGTCTCGGTGCTGCTGTGCTTCTGATCCACTGCTAC
CACAAGTTTGCCACAAGCCACCATCTCTCAGCTGAGATGACCTTCCGGAGGCCCGCCAGGCCTTCCCGGTG
AGCTACTCCTCTTCCGGTGCCCGCCGGCCCTCGCTGGACTCCATGGAGAACCAGGTCTCCGTGGATGCCCTCAAG
ATCCTGGAGGATCCAAAGTGGGAATTCCTCGGAAGAACTTGGTTCTTGAAAAACTCTAGGAGAAGGCGAATTT
GGAAAAGTGGTCAAGGCAACGGCCTTCCATCTGAAAGGCAGAGCAGGTACACCACGGTGGCCGTGAAGATGCTG
AAAGAGAAGCCTCCCCGAGTGAGCTGCGAGACCTGCTGTGAGATTCAACGTCTGAAGCAGGTCAACCACCCA
CATGTATCAAAATGTATGGGGCTGCAGCCAGGATGGCCCGCTCCTCTCATCGTGGAGTACGCCAAATACGGC
TCCCTGCGGGGCTTCTCCGCGAGAGCCGCAAGTGGGGCTGGCTACCTGGGCAGTGGAGGCAGCCGCAACTCC
AGCTCCCTGGACCACCCGGATGAGCGGGCCCTACCATGGGCGACCTCATCTCATTGCTGGCAGATCTCACAG
GGGATGCAGTATCTGGCCGAGATGAAGCTCGTTTCATCGGGACTTGGCAGCCAGAAACATCCTGGTAGCTGAGGGG
CGGAAGATGAAGATTTCCGATTTCCGCTTGTCCCGAGATGTTTATGAAGAGGATTCCCTACGTGAAGAGAGCCAG
GGTCCGATTCCAGTTAAATGGATGGCAATTGAATCCCTTTTTGATCATATCTACACCACGCAAGTGATGTATGG
TCTTTTGGTGTCTGCTGTGGGAGATCGTGACCTAGGGGGAACCCCTATCCTGGGATTCTCTGAGCGGCTC
TTCAACCTTCTGAAGACCGGCCACCGGATGGAGGCCAGACAACCTGCAGCGAGGAGATGTACCGCTGATGCTG
CAATGCTGGAAGCAGGAGCCGGAACAAAGCGCGGTGTTTGGCGACATCAGCAAAGACCTGGAGAAGATGATGGTT
AAGAGGAGAGACTACTTGGACCTTGGCGCTCCACTCCATCTGACTCCCTGATTTATGACGACGGCTCTCAGAG
GAGGAGACCCGCTGGTGGACTGTAATAATGCCCCCTCCCTCGAGCCCTCCCTTCCACATGGATTGAAAAACAA
CTCTATGGCATGTACAGACCCGAACCTGGCCTGGAGAGAGTCTGTACCACTCACGAGAGCTGATGGCACTAACACT
GGGTTTCCAAGATATCCAAATGATAGTGATATGCTAACTGGATGCTTTACCCCTCAGCGGCAAAATTAATGGAC
ACGTTTGATAGTTAACATTTCTTTGTGAAAGGTAATGGACTCACAGGGGAAGAAACATGCTGAGAATGGAAAGT

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FIGURE 2921B

CTACCGGCCCTTTCTTTGTGAACGTCACATTGGCCGAGCCGTGTTTCAGTTCCCAGGTGGCAGACTCGTTTTTGGT
AGTTTGTTTTAACTTCCAAGGTGGTTTTACTTCTGATAGCCGGTGATTTTCCCTCCTAGCAGACATGCCACACCG
GGTAAGAGCTCTGAGTCTTAGTGGTTAAGCATTCTTTCTTTTCAGTGCCCAGCAGCAGCCAGTGTGGTCTGTG
TCCATCAGTGACCACCAACATTCTGTGTTACATGTGTGGGTCCAACACTTACTACCTGGTGTATGAAATTGGAC
CTGAACTGTTGGATTTTTCTAGTTGCCGCCAAACAAGGCAAAAAAATTTAAACATGAAGCACACACAAAAAAG
GCAGTAGGAAAAATGCTGGCCCTGATGACCTGTCTTATTGAGAATGAGAGACTGCGGGGGGGGCTGGGGGTAG
TGTCAATGCCCTCCAGGGCTGGAGGGGAAGAGGGGCCCCGAGGATGGGCTGGGCTCAGCATTGAGATCTTGA
GAATGATTTTTTTTAAATCATGCAACCTTTCTTAGGAAGACATTTGGTTTTTCATCATGATTAAGATGATTCTTA
GATTTAGCACAAATGGAGAGATTCCATGCCATCTTTACTATGTGGATGGTGGTATCAGGGAAGAGGGCTCACAAGA
CACATTTGTCCCCGGGGCCACCACATCATCTCAGTGTTCGGTACTGAGCAGCCACTACCCCTGATGAGAACA
GTATGAAGAAAGGGGGCTGTTGGAGTCCCAGAATTGCTGACAGCAGAGGCTTTGCTGCTGTGAATCCACCTGCC
ACCAGCCTGCAGCACACCCACAGCCAAGTAGAGGCGAAAGCAGTGGCTCATCTACCTGTTAGGAGCAGGTAGG
GCTTGTACTCACTTTAATTTGAATCTTATCAACTTACTCATAAAGGGACAGGCTAGCTAGCTGTGTTAGAAGTAG
CAATGACAATGACCAAGGACTGCTACACCTCTGATTACAATTCTGATGTGAAAAAGATGGTGTGGCTCTTATA
GAGCCTGTGTGAAAGGCCCATGGATCAGCTCTTCTGTGTTTGAATTTAATGCTGCTACAAGATGTTTCTGTTT
CTTAGATTCTGACCATGACTCATAAGCTTCTTGTCTTCTTATTGCTTGTGTTGTGGTCACAGATGCACAACACT
CCTCCAGTCTTGTGGGGGCGAGCTTTTGGGAAGTCTCAGCAGCTCTTCTGGCTGTGTTGTCAGCACTGTAACCTCG
CAGAAAAGAGTCGGATTACCAAAACACTGCCTGCTCTTCAGACTTAAAGCACTGATAGGACTTAAATAGTCTCA
TTCAAATACTGTATTTTATATAGGCATTTACAAAAACAGCAAAATTGTGGCATTTTGTGAGGCCAAGGCTTGGA
TGCCTGTGTAATAGAGCCTTGTGGTGTGTGCGCACACCCAGAGGGAGAGTTTGAAAAATGCTTATTGGACACG
TAACCTGGCTCTAATTTGGGCTGTTTTTCAGATACACTGTGATAAGTTCTTTTACAAATATCTATAGACATGGTA
AACTTTTGGTTTTTTCAGATATGCTTAATGATAGTCTTACTAAATGCAGAAATAAGAATAAACTTTCTCAAATTATT
AAAAATGCCTACACAGTAAGTGTGAATTGCTGCAACAGGTTTGTCTCAGGAGGGTAAGAACTCCAGGTCTAAAC
AGCTGACCCAGTGATGGGGAATTTATCCTTGACCAATTTATCCTTGACCAATAACCTAATTGTCTATTCTGAGT
TATAAAAGTCCCCATCCTTATTAGCTCTACTGGAATTTTCATACACGTAAATGCAGAAAGTTACTAAGTATTAAGT
ATTACTGAGTATTAAGTAGTAATCTGTCAGTTATTAATAATTTGTAATAATCTATTTATGAAAGGTCATTAAACCAG
ATCATGTTCTTTTTTTTGTAAATCAAGGTGACTAAGAAAATCAGTTGTGTAAATAAAATCATGTATC

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FIGURE 2922

GATGAGAGCATTACCTCCAGCTGCAGAAGAAACACAGGGACAAGATGCTGCGCATGCAGAAAGGTGACCCACAA
GTCTATGAAGAACTTTTCAGTTACTTCTGCCCCAAGTTCCTGTCGCCTGTAGTGCCCAACTATGATAATGTGCAC
CCCAACTACCACAAAGAGCCCTTCCTGCAGCAGCTGAAGGTGTTTTCTGATGAAGTACAGCAGCAGGCCCAGCTT
TCAACCATCCACAGCTTCCTCAAGCTCTACACCACCATGCCTGTGGCCAAGCTGGCTGGCTTCCTGGACCTCACA
GAGCAGGAGTTCAGGATCCAGCTTCTTGCTTCAAACACAAGATGAAGAACCTGGTGTGGACCAGCGGCATCTCA
ATCCTGGATGGTGAATTTTCAGTCAGCCTCAGAGGTTGACTTCTACATTGATAAGCTTAATCGAACCCCTGAAGAAG
ATGGGACAGAGACCCTGATGACATTCACACACATTATTTAGGAACCTGTTTTGATATATTACAGGCAGGAAGTGT
TTTTGCTACCGTGAAACCTTTACCTAGATCAGCCATCAGCCTGTCTACTCAGTTAACAAGTTAAGGACCGACGTG
TTTCAAGTGGATATCAGTAAAGGATCTTTGGAGCC

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FIGURE 2923

ATGAAGGAAGACTGTCTGCCGAGTTCTCACGTGCCCATCAGTGACAGCAAGTCCATTTCAGAAGTCGGAGCTCTTA
GGCCTGCTGAAAACCTACAACCTGCTACCATGAGGGCAAGAGCTTCCAGCTGAGACACCGTGAGGAAGAAGGGACT
CTGATCATCGAGGGGCTCCTCAACATTGCCTGGGGGCTGAGGCGGCCCATCCGGCTGCAGATGCAGGATGACCGG
GAGCAGGTGCACCTCCCCCTCCACCTCATGGATGCCCAGACGGCCTAGCTGCCCTCTAAAGGAGCCATCGCCCCAG
AACGGGAACATCACAGCCAAGGGGGCCAAGCATTAGCCAGTGACACAAGGCTGAGAGTTCCACAGACAGCTCGGGG
CCCCTGAGGAGGCAGAGGAGGCCCCCAGCTGATGCGGACCAAGAGCGACGCCAGTTGCATGAGCCAGAGGAGG
CCCAAGTGCCGCGCCCCCGGTGAGGCCCAGCGCATCCGGCGACACCGGTTCTCTATCAACGGCCACTTCTACAAT
CATAAGACCTCCGTGTTTACTCCAGCCTATGGATCCGTGACCAATGTGAGGGTCAACAGCACCATGACAACCCTG
CAGGTGCTCACCTGCTGCTGAACAAATTTAGGGTGGAAGATGGCCCCAGTGAGTTCGCACCTCTACATCGTTTAC
GAGTCTGGGGAGCGGACAAAATTTAAAGACTGCGAGTACCCGCTGATTTCCAGAATCCTGCATGGGCCATGTGAG
AAGATCGCCAGGATCTTCCTGATGGAAGCTGACTTGGGCGTGGAAGTCCCCCATGAAGTCGCTCAGTACATTAAG
TTTGAAATGCCGGTGCTGGACAGTTTTGTTGAAAAATTTAAAGAAGAGGAAGAAAGAGAAATAATCAAACCTGACC
ATGAAGTTCCAAGCCCTGCGTCTGACGATGCTGCAGCGCCTGGAGCAGCTGGTGGAGGCCAAGTAA

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FIGURE 2924

MKEDCLPSSHVPISDSKSIQSELLGLLKTYNCYHEGKSFQLRHREEEGTLII EGLLNIAWGLRRPIRLQMQDDR
EQVHLPSTSWMPRRPSCPLKEPSPQNGNITAKGPSIQPVHKAESSTDSSGPLEEAEEAPQLMRTKSDASCMSQRR
PKCRAPGEAQRIRRHRSINGHFYNHKTSVFTPAYGSVTNVRVNSTMTTLQVLTLLL NKFRVEDGPSEFALYIVH
ESGERTKCLKDCEYPLISRI LHGPCEKIARIFLMEADLGVEVPHEVAQYIKFEMPVLD SFVEKLKEEEEREI IKLT
MKFQALRLTMLQRLEQLVEAK

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FIGURE 2925

CACACTGCTCAGGGAAGAGCCTGCTACGGTGGACTGTGAGACTCAGTGCACTGTCTCTCTCCAGCGACCCACG
CTGGACCCCTGCGGACCCTCCACCCTTCGGCCCCCAAGCTTCCCAGGGGCTTCCTTTGGACTGGACTGTCCCT
GCTCATCCATTCTCTGCCACCCCCAGACCTCCTCAGCTCCAGGTTGCCACCTCCTCTCGCCAGAGTGATGAGGT
CCCGGCTTCTGCTCTCCGTGGCCCATCTGCCACAATTGGGAGACCACGGAGGAGATGCTGCTTGGGGGTCTCTG
GACAGGAGCCCCACCCTCTCCTAGCCTGGATGACTACGTGAGGTCTATATCTCGACTGGCACAGCCCACCTCTG
TGCTGGACAAGGCCACGGCCCAGGGCCAACCCAGGCCACCCACAGGCCAGCCCAGGCCTGCCGGAAGGGCCGCC
CTGCTGTGTCCCTGCGAGACATCACCGCACGTTTCAGTGGCCAGCAGCCCACACTGCCCATGGCTGATACTGTGG
ACCCCTGGACTGGCTTTTTTGGGGAGTCCCAGGAAAAGCAGCCAAGCCAGAGGGACCTGCCAAGGAGGACTGGCC
CCTCTGCTGGCCTCTGGGGTCCACATAGACAGATGGACAGCAGCAAGCCCATGGGGGCCCCAGAGGGAGGCTCT
GTGAAGCCAGGATGCCTGGGCATTCCCTGGCAAGACCACCGCAGGATGGGCAGCAGAGCTCTGACCTAAGAAGCT
GGACTTTTGGGCAGTCTGCCAAGCCATGGCCTCCCGCCACCGCCCCCGCCCCAGCAGTGTCTCAGAACACTCT
ACTCGCACTCCCGGTGATCCATGAACTCTGACCCCTCCCCAGTAAAGGCTTCTGTAGAGAGCATGCTGGGTCTG
CATCTCCTCTCGTCTCCTCCATGGTGGTCACTGCCCCTGGCAGGTCTCTGAAAGGGAAATGCTTTTCTGCAGAGG
CCCCTGCTTGGGCAGTTCACAGTGAGACCGACCCCTCTGAATATGATAACAGCCTGTTTCACATGAGGAGATGT
TACCAATCCCGTTCGCTCTGACCCTTGCTGGCTGATCACCTTGAGCAACTTACTTAACATCTGTGTTCCTCAGTT
TCTCATGGGTAATATAGGGATAATTACTGGCACCTGCCTCCCAGGCCATTCTGACGTGTAACCGCATATAGGAGC
CCACTGGCTGAGTAGCTACCATCATCGCTGGTGGGGAAACTGGTGGTAGGGGTGTGAGGGTAGTGGGGGTGTGAG
CCCCCAGGTGTTTTCAGAACAAAGGCCTCGGGCACTCCCAAGTCTGCCTCTTGGCTCCCACCCTCAAAGCCCATGT
TCTGTGAGGCCCAAGAGAACACATGGAGTCTTAGCAAATGCACTAATGTATTCCGGGGGACTGTCACCTGGCACC
ACTGGGGCACTCTGCTGGCTACAACCTACATACGTCTGTGGTGGCATTGGGAGAGTTCCCCCATGATGAGGGCCAA
GATAGAACTGTACCACTCAGTGCTACCATCCCCACCCCTACACCACTTCCACACAGGGGCCTCATGGCATGGTC
AGGGTCCCAGCTGTGGGTGAGAGCAGGGCACTGTCCAGCTGTCCACTGGGGAAGTCAAGATGTCCTAAGGCCCAG
GTCAGGGCATCTGGAGTCTGAAGGACCCTAGTTCTTAGAGGCATCTGGCAGCAAGAAGGTGAGGCATCAGGGAAC
GGGAATCAGGCTGGGACTGATCAGAGGTGAAGGGACAGAGAGAGGAGAGGAAGATTGAGCTGGGGGCAACAG
CCAAGCTCACCTGGGCAGGTCTCTGCCACCTCCTTGCTCTGTGAGCTGTGAGTCTAGGTATTCTCTTTTTTGT
GGCTATTTTAAATTGCTTTGGATTTGTTAAATGTTTTCTGTCTTCTGTAAAGTGTGTTTTCTCTGGAGATAGAAT
GTAAACCATATTAAAAGGAAAAAGTTTCAGACAAGCAATTACCCAGTTTCCTTATCTATAAAATGGGGACATCAG
CAATGTTCTTCACACCCTGCAAGGGCTGGGAATCTGCGCATGTGAACCTGGAGCTGCATTTATGAGCACTGTAGA
CAAATGTTTGTATCTGTCAC

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FIGURE 2926

GTCGTGGAAGCAGGACTGCGCCGCGTCTTCCTCAAGGTGGGGTTCGGGGGGCCACCGAATCGCTGTCACGCCGGC
AGGTTGAGAACAACAAACATGCACCTGGAGTTTCCCGGAGCCCTCTGCGTGGTTGAGCTTCGGTGGAATTTCTGGG
GCTCTTGGCTGCCAGCCGCGCTTGCTGGTAGCAACAGAAACCAGTCTGCTCGCTCCGTGGACATTTTATTAC
CATCCAGAAGTGTCTCCCACTGAAGGCATCCGTGGTTGTTTTTAAGCCACAAAAAGCCACACCCAAGATCACCT
GACACCCACCCTGACAAGTGTCCATGATGCTGGGCCCTGAGGGAGGTGAAGGCTTTGTGGTCAAGCTCCGTGGCC
TGCCCTGGTCTGCTCTGTTGAGGACGTGCAGAACTTCTCTGACTGCACGATTCATGATGGGGCCGCAGGTG
TCCATTTTCTACTACTAGAGAGGGCAGGCAGAGTGGTGAGGCTTTTGTGAACTTGGATCAGAAGATGATGTAA
AAATGGCCCTGAAAAAGACAGGGAAGCATGGGACACCGGTACATTGAGGTGTTCAAGTCCACAGAACCAGAGA
TGGATTGGGTGTTGAAGCACAGTGGTCCCAACAGTGCCGACAGCGCCAACGATGGCTTCGTGCGGCTTCGAGGAC
TCCCATTTGGATGCACAAAGGAAGAAATTGTTTCACTTCTCTCAGGGTTGGAAATTGTGCCAAACGGGATCACAT
TGCTGTGGACCCCGAAGGCAAGATTACAGGGGAAGCGTTCTGTCAGTTTGCTCGCAGGAGTTAGCTGAGAAGG
CTCTAGGGAAACACAAGGAGAGGATAGGGCACAGGTACATTGAGGTGTTTAAGAGCAGCCAGGAGGAAGTTAGGT
CATACTCAGATCCCCCTCTGAAGTTCATGTCCGTGCAGCGGCCAGGGCCCTATGACCGGGCCGGGACTGCCAGGA
GGTACATTGGCATCGTGAAGCAGGCAGGCCTGGAAGGATGAGGCCCTGGTGCTACAGCACAGGCTACGGGGGCT
ACGAGGAGTACAGTGGCTCAGTGATGGCTACGGCTTACCACCGACCTGTTCCGGGAGAGACCTCAGCTACTGTC
TCTCCGAATGTATGACCACAGATACGGCGACAGTGAGTTCACAGTGCAGAGCACCACAGGCCACTGTGTCCACA
TGAGGGGCTGCCGTACAAAGCGACCGAGAACGACATTTACAACCTTCTCTCTCTCAACCCTGTGAGAGTCC
ATATTGAGATTGGCCAGATGGAAGAGTGACGGGTGAAGCAGATGTTGAGTTTGCTACTCATGAAGAAGCTGTGG
CAGCTATGTCAAAGACAGGGCCAATATGCAGCACAGATATATAGAATCTTCTTGAATTCAACAACAGGGGCCA
GCAATGGGGCGTATAGCAGCCAGGTGATGCAAGGCATGGGGGTGTCTGCTGCCCAGGCCACTTACAGTGGCCTGG
AGAGCCAGTCAGTGAGTGGCTGTTACGGGGCCGGCTACAGTGGGCAGAACAGCATGGGTGGCTATGACTAGTTTT
GTTAGGAACATTTGAGTTACTTCAATCATTTTTCACAGGCAGCCAACAAGCAATTAAGAGCAGTTATAATAGAGGA
AGCTGGGGGACCCATTTTGCACCATGAGTTTGTGAAAATCTGGATTAAAAAATTACCTCTTCAGTGTTTTCTCA
TGCAAAATTTTCTTCTAGCATGTGATAATGAGTAACTAAACTATTTTCAGCTTTTCTCAATTAACATTTTGGT
AGTATACTTCAGAGTGATGTTATCTAAGTTTAAGTAGTTTAAGTATGTTAAATGTGGATCTTTTACACCACATCA
CAGTGAACACACTGGGGAGACGTGCTTTTTTGGAAAACCTCAAAGGTGCTAGCTCCCTGATTCAAAGAAATATTTT
TCATGTTTGTTCATTCTAGTTTATATTTTCAATTAATCCTTTAGGTTAAGTTTAAGCTTTTAAAAAGTTAGTT
TTGAGAATTGAGACACAATACTAATACTGTAGGAATTGGTGAGGCCCTTGAATTAACCTTTCTTTGTACTGTGAT
TTCTTTTGGGTGTATTTTGTAAAGTGAACCTTGTTAAATTTTTTGTAACTAAATTTTTTCTTAAAAATAAGA
CTTTTTCACAATGACTGGCACAGATTACTCAGCAAAAGATAGCAAAACGGGTGGTTGAAGATAATTCATTTTAAT
CGTAATGTATTTTAGTGTGAATTTAAAAATTTTATACATCAAATCTATGATCTCCCTTATATTCTTATGATGAGG
CTAAATAAAAGTCTAATAAAAAATGTTAAATATGTGAATGGTGAAATGGTGACTAGCAGCACACATTCTGGGAAG
CATCAAATAGACACACGGCCCCAGCCACCTGCAACTTATGTGCACGTGTGTAACCATTCAGAATTTTCTGCTA
GGCCCTTGATGCTGGAGTCACATCTGTTGATAGCTGGAGAACCTTAGTTTCAAGTACTACATTGTGAAAGCAATT
ATTTTGTCTTCTAGTTTTTATAAAATGCTGATTTAACTTTT

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FIGURE 2927

CGTGTGCACCCTAGCGTCAGCCTCGAGTTTGACCAGCAGCAGGGGTCGGTGTGTCCCTCTGAATCTGAGATCTAT
GAGGCAGGAGCTGAGGACAGGATGGCAGGAGCGCCCATGGCTGCTGCTGTACAGCCTGCTGAGGTGACTGTTGAA
GTTGGTGAGGACCTCCACATGCACCACGTTTCGTGACCGGGAGATGCCTGAAGCTTTGGAGTTTAACCTTTCTGCC
AATCCAGAGGCAAGCACAATATTCCAGAGGAACTCTCAAACAGATGCTTTGGAGTTTAACCTTTCTGCCAATCCA
GAGGCAACACAATATTCCAGAGGAACTCTCAAACAGATGGTGAGACGACATTGTTTTTCCGCCAAGAGAAAGA
ATAAAATCTCTTGTTTGATCAGGTT

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FIGURE 2928

MGNILTCRVHPSVSLEFDQQQGSVCPSESEIYEAGAEDRMAGAPMAAAVQPAEVTVEVGEDLHMHHVRDREMPEA
LEFNLSANPEASTIFQRNSQTDALFNPSANPEANTIFQRNSQTDGETTLFFPPRERIKSLV

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FIGURE 2929

GAATTTCCGTTTCCGGCGGTGTCCAAGCGGACCTAAGGAGTCGCAGTTGTGAACAGGTTAGAGTTACTTGTTATT
GGTAAATAGCCACTATGGAGACTAAGGACCAGAAGAAACACAGAAAGAAAAACAGTGGACCCAAAGCTGCAAAGA
AAAAGAAGTGGCATCTGCAGGATCTCCAGCTAGGAGACGAAGAAAATGCCCAGAAGAGAAATGCCAATGCTTTTG
CAGTTCAGTCTGCTGTGTGGATGTCTCGATCCTTTCACAGGACTCTGGATTTGAAGACACAAAAGCATCATATTC
CAGTGGTTGATGGAACCTCCACTAGAGCCGCCACCAATAGCGGTAGTGGTGACGGGGCCTCCAAAGTTGGAAAGAG
CACTTTGATATAATGCCTCATTGGAACCTCACCTGGCAGAAGTTCACCGAGATCAGAGGCCCTGTGACGATCGT
GTCAGGTAAAAAGCGCAGACTCACCATTATTGAATGTGGGTGTGACATTAACATGATGATTGATCTGGCTAAAGT
AGCAGATCTGGTAAAGTGAGCAGGGGCAGCCTGGGGTGCTGATGGAGACTTACAGCATTGTGATAGGTTATTTACC
CCGTGATGAAGGGAAGAGAGTTTTGTGATTATTAAAAGGATCATGGTCATTATCAGGGATATAGTAGATGTGATT
GAATTGATGATGATAATAATAATAGTAATAAATGTTGTCATATTAATAATACAAATGGAATGTGCACAATGAAAT
GTGTTCCAAAATCTAAAAGCAGATCACAGGA

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FIGURE 2930

ATGGCATTCAAGACCCTTTGTGGTGAGGTAGATGAGCGTCAGGAAGGATCATCCTCCTCATCCGCAGATCCAACA
GCCGGTAACATTCCGGCCTACAGCACGTCCCTACCTCAGCTGAACCGCTGGGACCAACACGCCGTACCGCAGCCG
CGCACGCCCAGCACGCCACTCCCGGCCTGCCCGGGGCTGACGTCATCACATCGCGACGCTCGCTGATCCCGCCC
GGATTACCTGGGCTCTGGACGAGAAGCGCCTCGTCCCTTAGCCACACCCCCGGGGAGCCAGGGGCATCTGGCAT
CCGGCAAGTGGCAGCTCCCTCATCATCCTGTCTGATCCAAATTCAACCCACATTACGCCAGCTCTGAAGGTACGG
CTGGCTGTATGTGGCAAACAGAGCAGCCACGACCACAACTGCCGGGACTTCACAATTGGCTTTGTAGTTTGTCT
GAGGGACTGTCCAGGTTTGGAGAAGTCCTAGCCTATCACAGGGATACCTGGTTTGAAGTGTGACCTCATATCTT
TACCGTGACCTCGGTGGGCCAGAGATGCAGGCAGCTGGCCATGAAGACGCACTTCCCCGAGGAAGAGGAGACAGG
CTCACCCGCTGCAGGGCAGTCCCACAGCCTGCCTGCAATGGAGCCTTCAAGAATACAAACACTTCTAGAACAAGT
TATCAGGAACATGGCATGGTTGGGCCTTCTCTGAACGGGCCCCAGGGTAAGCCATCTGATAAGGGAGAAAACATCT
GCCAACACCCTCAGCCACAGCGTCACTGGGCTCAAGGGCCACAAAGGAGGCAAAAGCCTGCAGGGAAAAGAAATC
CAAGACAGTAAAACAGAAGAACGAGTATTTGCCTGTAAGTATCTGTGTGAGAGGTCTCTGGTGAGGTGCCAGAG
CACCCAGGACCAGCACACAAGACACAGTCATACACTGAGATGGAGGACAAGGTTCCCTACAGGGACGAAGATGAG
ACAACAGAGCGACAAACACAGGAAAGTGACTTCAGGCATCCATTAGGAGGGACAAGCAGTAGCCCTACTTATGGG
TGGCAAGATGTCACCTTCATTCTGGCAAAGCTGATTGAAGAATGCAGCATTAGATGTGCAGCTATACAGACCTGC
CAGATCAACAAGCCCTCGGGCAATGCCTATGATGCTGCTTCACTGGCTGCACAGTCACAGGGACCTCCCCAGAAC
TGCTGTGCAAAGGGTCAACTTCCCAGACCCCCAGAGGCCAATGTCTTCATGGTGCTCCTGGTGAGGCCACCAGCT
GCTCCCAGCCCGGCTGCCACACAGAGAGTACGGCAGCCTCACACTGCTGGTTATCCCAGAGGCTTGGAGCAGGGT
TGGAGGGATGAAGCAGGCCTGGACTGCGTCCCTAGGAAGACAGAAGCCATCGTCGATATGGCCGTTCCCTTGTCC
CCTCCCTCCTGCTCCTACAGCAAGCATAACAGGGCTGACTCCTCTCCACACCGCAGCATGGAGAATTAGAGGGC
AATAATAGCAACTGCTTGCTTGTAAGTGCTTGGAGCTCAGAGGAGAAAAGGTGTCAGACAAGTGTAATGTTA
CTACTGGCACAGGCCAGAGGATGGAATGGAAAATCCCAGCAGAAATTGGGAATCAGAGGAAGCCATTTGTCAGC
TCCTCTGAACAAATGGATACAGGAAAAGGGGCCTTCTCTGGCAGCCAGGCACAGCCCAGACCACTGCTGCCAC
AGCCCTCACCAAGAGAGGAACATAGAGGGGAAGCGGGGAGGGGAGGAGGCTAGTAATATAGCTCATAGTCAG
ACTCAGACCAATCTGCTGGTCTTGGACAAGGAGTTTTGTGAGCAGAGAACTCATGCTGCTCTCCTTGGGCACATG
GAAATTGGAATCCTAAGGAGTCCCTCACAAAGCCCCAGAGAAATCTGGCCATTCTCCAGGGGACCGAGCATCCCC
ATGGTGCTGCAATGGGAGTCCCCAGAAGCTACCAACCCCCAACAGCTTTGGACACCCCTGCTCTTATTTTCTGCA
TCCCAGAACTACCTGCCCTAGTGCTGAGCTCATGGAAGTTCTCAGGAAGCATCTTCACATGGATGTTGAAGAG
AAAAAATCTCCAGTCCCACGGGGTGCTGTGGGAGTCCAAAATCAGGACTCCAAAAGGCCTGTGA

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FIGURE 2931

AGTGCTCTTGGCCGGGAGGAGGCTGTGCTGCACCAGCACCTCTTGCTCCACATCTCCAGAGAGCCCAGGGCCCTG
TGGCCGAGTGTGTCCAGCCAGTGTGTCATGGGGAGCTTCCATATCTCATGGCTCCTTGCTGGGCCAAGCCCTCCAG
AACCCCAAACCCCAAAGACTGATGAATGCCAGAGTGGCCACCTTGCTTATCTGTGGCCCCGGCCCTGGTGATCA
CCATGGCAGCTGGGAAGGGAGCCCCGTGAGCCCATCGGCTGAAAACAGATGGCGACTTAGCGAACCTGAGCTGG
GCCGGGGCTGCAAGCCAGTGTGCTCGAGAAGACGAACCGCTGGGCCCTGAGGCTGCTGTGGGCAGGGCGGGCC
GGGATGTGGGCAGTGCAGGAGCTGGCACTGTTGGTAGCCCCAGGCAAGCCCCGACCTGGCAAGCCGCTGCCCCGA
AGACACGTGGAGAGCAGAGGCAGAGCGCCTTCACGGAGCTGCCGAGGATGAAGGACCGGCAGGTGGATGCTCAGG
CCCAGGAGAGGGAGCAGATGACCCACAGGCCAACCTGGTGCCCCACAGCTGACCCAGAACATCCCCAGAGGCC
CAGCTGGCAGCAAAGTCTTCTGTGTGGCCAGCGGAGCAGAAAGTGAGCAAAGAAGCGCCTTTAGCAAACCAA
CCAAGCGACCAGCAGAGAGGCCGTAGCTAACCTCAGTCTTCCCTGCAGGGGAATCTGCAGATGCCCTGGGGGAGC
TGTCTGGACTCCTCAACACTACAGACCTCGCTTGTGGGGTCGACTTCAACTCCCCAAGCTTTTGGTTGGTGATT
TGTGGAACCTTGCAAGCATTGCCACAGAATGCTCCACTCTGTAGCACTTTTCTGGGTGCCCCCTACACTGTGGCTGG
AGCATAACCCAGGCCCAGGTGCCCCACCCTCATCTCTCCACCCTTCGTGGGCCCTCTCTGCCACCCACCCTCA
CCTCCCTGGGCTTGTCCACCCAGAAGTGGTGTGCAAAGTGCAACCTGTCTTTTCGCCTAACGTCCGACCTGGTCT
TTCACATGCGATCCCACCACAAAAAGGAGCATGCGGGGCCTGACCCACATTCTCAGAAGCGGAGAGAAGAGGCC
TTGCCTGCCCTGTGTGCCAGGAGCACTTCCGGGAGCGCCACCACCTCTCCCGGCACATGACTTCTCACAGCTAGC
AGGTGACCGCAGAATGACCTGCTGGGTGCAGCAGCCAGCCTTTGGCAGAGGGGGCTCCCTGGGCCTGCGTTGAG
GGGGCTGTGATGGTCCTTTGCAGAGCTGCTGCTTTTGGCATTTCATAGATAAACAGCTCAGGCATAATTTGAAAA
GCCACACCTGCATGATGTGTTTTGAAGGAAATGAAGTCCTGAAATAAAGTGATGGGCTTTGCAAATCCAGGGTAG
AGGCCCTAACAGGCACAGAGAGCAGGGGCAACTCCTGGCACACATCATGGGCTTTGGAGGCACACAAGCCTGGAT
TCGAATCTGGGCTCTTTACATACTAGCTGTGACCTGGACAAAGAGCTTTAACCTGCTGAGTCCCCATTTTCTC
ATCTGTGAAATGGAGATGATAACACTGTGTCTTAGGTTGGCATTACAGGTCACATGAAAGGTGTGTGGAAAGTGGC
CAGCATTCTGCCTGCAGACCTGAGCACTGAGTCAACAAGGTTTGTGATGATGTCTGTACTAGTTAGCTATTGTT
ATTAACAAGATCTCCATGGCAGACAAGCTAAAGCATCTGCCTAAGTCGTGAGTCTGTGGGTGGCTCAGGTTAAG
CTGAGCAGGTGGGGATCTCAGCCAGCCTCCCAGACTGCACCTCTTCTATTGCTCTCCTCTGTCCACCGTCCAGG
CAGCAGCACTCCCACCTGGCTGCTCTGATGTCTCGCTCCCTCCATTCCCTGCCTCTCACCATGCACGCATCCATT
GTCCACACACACACAACCAGATAATCTTCTGAAAGTGTAACCTCAGATGATGCCTCCAACCCTGTGGCTGCCCTC
ACACTTACAGGCCTAACCCAGCAGGACCTGCCAGCTGCTTCATGAACAAGTCCCTGCCTCATGTTAATGCAAG
CACTCATTTCACCTCTCCCTGTGTGCCAGGCAATAGCATAAGCACTGGAAGAATACAGATGTTATAGTGAGTCCTA
CAATAGCCCTGGAAGGCAAGAGCTGTTTCTTTCCATTTCTACAATGAGTCAATTGCAGATGATGCTATAACACT
TCCAGTGTCTTGACACTTCCCTGAAGCTATACCTGCTACCTTCATGGGCCGAGCTTGCCCTTATGAGGCCCCA
GGTGGCAGTGGGCAGAGGGGACCCCGCTATACCACCTCGCTGCTGTTCCTGCTGCTCCCGTGTCTGACCAC
AGCTCTGGTGCCGTTTCTCAAGCCTGGGCTTCATTCAACATTTTCTATCTAGCTCTTCATGGGTGCTGCTCCTGCT
ATGGTTCCACAGGGCTTCTTCTCGCAGGTGAGCTCCTTAGAGAGGTCTCCAGATTCCCCGTAAAGCAGCCCTGC
AGCCTCTGCCTCTCTCAGCCGCATCACCTGTTGCTTCCTTCACAGCATGTCTCACCATCTGCAACCATCTTTCT
GTTTGTGCTCTTGTGATTTGCTGCCTCCACACTGTGAGCTCCTTGGGAACAGAGATTGGTTTGTCTTACTGTGCA
TCCCTGGTGCCAGAACAGGGCATGGCATATTGTTGGTGCATAATAAATATTGTGGAAAT

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FIGURE 2932

MP EWPPCLSVAPALVITMAAGKGAPLSPSAENRWRLSEPELGRGCKPVLL EKTNRLGPEAAVGRAGRDVGS AELA
LLVAPGKPRPGKPLPPKTRGEQRQSAFTELPRMKDRQVDAQA QEREHDDPTGQPGAPQLTQNI PRGPAGSKVFSV
WPSGARSEQRSASF SKPTKRPAERPELTSVFPAGESADALGELSGLLNTTDLACWGRLSTPKLLVGD LWNLQALPQ
NAPLCSTFLGAPTLWLEHTQAQVPPSSSSTTSWALLPPTLSLGLSTQNWCAKCNLSFRLTSDLVFHMRS HHKK
EHAGPDPHSQKRREEALACPVCQEHFRERHHLSRHMTSHS

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FIGURE 2933

GGCCTGCTCACTCCTCAGCTGCAGGAGCCAGACGTGTGGAGTCCCAGCAGAGGCCAACCTGTGTCTCTTCATCTC
CCTGGGAAAGGTGCCCCGAGGTGAAAGAGATGGCCTGGTGGAAATCCTGGATTGAACAGGAGGGGTGTCACAGTG
AAGAGCAGCTCCCACTTCAACCCAGACCCTGATGCAGAGACCCTCTACAAAGCCATGAAGGGGATCGGGACCAAC
GAGCAGGCTATCATCGATGTGCTCACCAAGAGAAGCAACACGCAGCGGCAGCAGATCGCCAAGTCCTTCAAGGCT
CAGTTCGGCAAGGACCTCACTGAGACCTTGAAGTCTGAGCTCAGTGGCAAGTTTGAAGAGGCTCATTGTGGCCCTT
ATGTACCCGCCATACAGATACGAAGCCAAGGAGCTGCATGACGCCATGAAGGGCTTAGGAACCAAGGAGGGGTGTC
ATCATTGAGATCCTGGCCTCTCGGACCAAGAACCAGCTGCGGGAGATAATGAAGGCGTATGAGGAAGACTATGGG
TCCAGCCTGGAGGAGGACATCCAAGCAGACACAAGTGGCTACCTGGAGAGGATCCTGGTGTGCCCTCTGCAGGGC
AGCAGGGATGATGTGAGCAGCTTTGTGGACCCAGGACTGGCCCTCCAAGACGCACAGGATCTGTATGCGGCAGGC
GAGAAGATTCTGTTGGGACTGATGAGATGAAATTATCACCATCCTGTGCACGCGCAGTGCCACTCACCTGCTGAGA
GTGTTTGAAGAGTATGAGAAAATTGCCAACAAGAGCATTGAGGACAGCATCAAGAGTGAGACCCATGGCTCACTG
GAGGAGGCCATGCTCACTGTGGTGAAATGCACCCAAAACCTCCACAGCTACTTTGCAGAGAGACTCTACTATGCC
ATGAAGGGAGCAGGGACGCGTGATGGGACCCTGATAAGAAACATCGTTTCAAGGAGCGAGATTGACTTAAATCTT
ATCAAATGTCACTTCAAGAAGATGTACGGCAAGACCCTCAGCAGCATGATCATGGAAGACACCAGCGGTGACTAC
AAGAACGCCCTGCTGAGCCTGGTGGGCAGCGACCCCTGAGGCACAGAAGAACAAGAGCAAAGACCATGAAGCCAG
AGTCTCCAGGACTCCTCACTCAACCTCGGCCATGGACGCAGGTTGGGTGTGAGGGGGGTCCCAGCCTTTCGGTCT
TCTATTTCCCTATTTCCAGTGCTTTCCAGCCGGGTTTCTGACCCAGAGGGTGGAACCGGCCTGGACTCCTCTTCC
CAACTTCCTCCAGGTCATTTCCAGTGAGCACAATGCCAACCTTAGTGTTTCTCCAGCCAGACAGATGCCCTCA
GCATGAAGGGCTTGGGGACTTGTGGATCATTCCTTCCCTGCAGGAGCTTCCCAAGCTGGTCACAGAGTCTCC
TGGGCACAGGTTATACAGACCCCAGCCCCATTCCCATCTACTGAAACAGGGTCTCCACAAGAGGGGCCAGGGAAAT
ATGGGTTTTTAAACAAGCGTCTTACAAAACACTTCTCTATCATGCAGCCGGAGAGCTGGCTGGGAGCCCTTTTGT
TTAGAACACACATCCTTCAGCAGCTGAGAAACGAACACGAATCCATCCCAACCGAGATGCCATTAACATTCATCT
AAAAATGTTAGGCTCTAAATGGACGAAAAATTCTCTCGCCATCTTAATAACAAAATAAACTACAAATTCCTGACC
CAAGGACACTGTGTTATAAGAGGCGTGGGCTCCCTGGTGGCTGACCAGGTCAGCTGCCCTGGCCTTGACCCCT
CTGCATGCAGCACAGAAGGGTGTGACCATGCCCTCAGCACCCTCTTGTCCTCCACTGAACGGCAACTGAGACTGG
GTACCTGGAGATTCTGAAGTGCCTTTGCTGTGGTTTTCAAATAATAAAGATTGTATTCAACTC

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FIGURE 2934

GAATTTCCGTTTCCGGCGGTGTCCAAGCGGACCTAAGGAGTCGCAGTTGTGAACAGGTTAGAGTTACTTGTTATT
GGTAAATAGCCACTATGGAGACTAAGGACCAGAAGAAACACAGAAAGAAAAACGGTGGACCCAAAGCTGCAAAGA
AAAAGAAGTGGCATCTGCAGGATCTCCAGCTAGGAGACTAAGAAAATGCCAGAAAGAGAAATGCCAATGCTTTTG
CAGTTCAGTCTGCTGTGTGGATGTCTCGATCCTTTACAGGACTCTGGATTTGAAGACACAAAAGCATCATATTC
CAGTGGTTGATGGAACCTCACTAGAGCCGCCACCAATACCGGTAGTGGTGACGGGGCCTCCAAAGTTGGAAAGAG
CACTTTGATATAATGCCTCATTTCGGAACCTTACCTGGCAGAAGTTCACCGAGATCAGAGGCCCTGTGACGATCGT
GTCAGGTAAAAAGCGCAGACTCACCATTATTGAATGTGGGTGTGACATTAACATGATGATTGATCTGGCTAAAGT
AGCAGATCTGGTACTGATGCTTATAGATGCCAGCTTTGGGTTTGAAATGGAAATGTTTGAGTTTCTAAACATCTG
TCAAGCACATGGCTTTTCTAAATTTCTGGGAGTTCTCACCACCTCGACTCCTTCAAGCATAACAAGCAACTGAA
GAAGACAAAGAAGCGATTAAACACAGGTTCTGGACAGAAGTTTACCAGGTTGCCAAACTGTTCTACCTTTCTGG
AATGGTGCATGGAGAATATCAAAACCAAGAAATCCACAATCTGGGCCATTTTATTACAGTTATGAAGTTTAGGCC
TCTCATGGCAAACTTTTACCCTTATATCCTGGCAGACAGGATGGAAGATTTGACAAACCCGGAGGATATCCAAA
CAAACATCAAATGTGACCGGCAGGTGTCACCTTATGGTTATTTAAGAGGAGCACACTTCAAAGATAAAAGCCAAA
TTCACATGCCAGGACAAGGTGGGGCTCACCATGAGCTGGTCCAGAGTCTCATCTCCACCTACTCCACCATTGAT
GCCAAGATGGCTTCAAGTCGAGTGACGCTGCTTTCCAATTCAAACCCTTGGGTGAGAGGCTATAGATAATCAA
GGGTAAGTCTGCTTTTTTTTCTATTTTTTAATAAAAAGATATATTACAGAA

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FIGURE 2935

CGGGGGCGAGGGGGCGGCAGGCAGGTGTAGCGCTGCCCTGGGCGGGCTTGACCCCCACACCCAAGTGAGCGGCC
TGCTCACTCCTCAGCTGCAGGAGCCAGACGTGTGGAGTCCCAGCAGAGGCCAACCTGTGTCTCTTCATCTCCGTG
AGAAAGGTGCCCCGAAGTGAAAGAGATGGCCTGGTGAAAGCCTGGATTGAACAGGAGGGTGTACAGTGAAGA
GCAGCTCCCACTTCAACCCAGACCCCTGATGCAGAGACCCCTCTACAAAGCCATGAAGGGGATCGGTGTGCGGTCCC
AACTGCTCAGCCACCAAGCAGCTGCCTTCGCCTTCCCCTCCTCCGCCCTCACCAGTGTGTACCCCTGGGGGCAGC
AGGGTCACTTGTGCTGTAACCCTGCAGGGACCAACGAGCAGGCTATCATCGATGTGCTCACCAAGAGAAGCAACA
CGCAGCGGCAGCAGATCGCCAAGTCCTTCAAGGCTCAGTTGCGCAAGGACCTCACTGAGACCTTGAAGTCTGAGC
TCAGTGGCAAGTTTGTAGAGGCTCATTGTGGCCCTTATGTACCCGCCATACAGATACGAAGCCAAGGAGCTGCATG
ACGCCATGAAGGGCTTAGGAACCAAGGAGGGTGTATCATTTGAGATCCTGGCCTCTCGGACCAAGAACCAGCTGC
GGGAGATAATGAAGGCGTATGAGGAAGACTATGGGTCCAGCCTGGAGGAGGACATCCAAGCAGACACAAGTGGCT
ACCTGGAGAGGATCCTGGTGTGCCTCCTGCAGGGCAGCAGGGATGATGTGAGCAGCTTTGTGGACCCGGCAGTGG
CCCTCCAAGACGCAAGGATCTGTATGCGGCAGGCGAGAATATTCGTGGGACTGATGAGATGAAATTCATCACCA
TCCTGTGCACGCGCAGTGCCACTCACCTGCTGAGAGTGTGTAAGAGTATGAGAAAATTGCCAACAAGAGCATTG
AGGACAGCATCAAGAGTGAGACCCATGGCTCACTGGAGGAGGCCATGCTCACTGTGGTGAAATGCACCCAAAACC
TCCACAGCTACTTTGCAGAGAGACTCTACTATGCCATGAAGGGAGCAGGGACGCGTGATGGGACCCCTGATAAGAA
ACATCGTTTCAAGGAGCGAGATTGACTTAAATCTTATCAAATGTCACCTCAAGAAGATGTACGGCAAGACCCCTCA
GCAGCATGATCATGGAAGACACCAGCGGTGACTACAAGAACGCCCTGCTGAGCCTGGTGGGCAGCGACCCCTGAG
GCACAGAAGAACAAGAGCAAAGACCATGAAGCCAGAGTCTCCAGGACTCCTCACTCAACCTCGGCCATGGACGCA
GGTTGGGTGTGAGGGGGGTCCCAGCCTTTCGGTCTTCTATTTCCTTATTCCAGTGCTTTCCAGCCGGGTTTCTG
ACCCAGAGGGGTGGAACCGGCCTGGACTCCTCTTCCCAACTTCTCCAGGTCATTTCCAGTGTGAGCACAATGCC
AACCTTAGTGTTTTCTCCAGCCAGACAGATGCCTCAGCATGAAGGGCTTGGGGACTTGTGGATCATTTCTTCTCC
CTGCAGGAGCTTCCCAAGCTGGTCACAGAGTCTCCTGGGCACAGGTTATACAGACCCAGCCCCATTCCCATCTA
CTGAAACAGGGTCTCCACAAGAGGGGCCAGGGAATATGGGTTTTTAACAAGCGTCTTACAAAACACTTCTCTATC
ATGCAGCCGGAGAGCTGGCTGGGAGCCCTTTTGTGTTTAGAACACACATCCTTCAGCAGCTGAGAAACGAACACGA
ATCCATCCCAACCGAGATGCCATTAACTTCTATCTAAAAATGTTAGGCTCTAAATGGACGAAAAATTCTCTCGCC
ATCTTAATAACAAAAATAAATACTACAAATTCCTGACCCAAGGACACTGTGTTATAAGAGGCGTGGGCTCCCCTGGTG
GCTGACCAGGTGAGCTGCCCTGGCCTTGCACCCCTCTGCATGCAGCACAGAAGGGTGTGACCATGCCCTCAGCAC
CACTCTTGTCCCACTGAACGGCAACTGAGACTGGGTACCTGGAGATTCTGAAGTGCCTTTGCTGTGGTTTTCAA
AATAATAAAGATTTGTATTCAACTC

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FIGURE 2936

MPKARQSPGARGRQAGVALPWAGLHPHTQVSGLLTPQLQEPDVWSPSRGQPVSLHLPKGKGAPEVKEMAWWKSWE
QEGVTVKSSSHFNPDPAETLYQAMKGIGVGSQLLSHQAAAFAPSSALTSVSPWGQQGHLCCNPAGTNEQAIID
VLTKRSNTQRQQIAKSFKAQFGKDLTETLKSELGKFERLIVALMYPPYRYEAKELHDAMKGLGTKEGVIIIEILA
SRTKNQLREIMKAYEEDYGSSLEEDIQADTSGYLERILVCLLQGSRDDVSSFVDPGLALQDAQDLYAAGEKIRGT
DEMKFITILCTRSATHLLRVFEEYEKIANKSIEDSIKSETHGSLEEAMLTVVKCTQNLHSYFAERLYYAMKGAGT
RDGTLIRNIVSRSEIDLNLIKCHFKKMYGKTLSSMIMEDTSGDYKNALLSLVGSDP

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FIGURE 2937

GCTAATACTGAAATTGTCAGGTCGGTGTAAGTGTGACAGTCCGGAAGCAATGGAGGCTTCAGTGAGCAGGACCAG
CTGCCCTTTCTCACCACCACAGCTTGATCTCTCTCACAACCTCCTCTCCACCTCCACTGACCTCTGGGTTGGTTTT
CTCCTGCACGATCTTTCCACGTGTCAGGGGCTGGAGGCACCCTACAAGAGCTGACTTTACATTTCCCTTCCTAGA
GGTAATCCCAGAACAAAAGAGAGCAGTTTTATTTATTTTTTTCAAGAGAATTAAATTGTTTATTGATTACACATG
ATAATGGATGATACACAAGCTTCATTCCCCTCTATAATTTAATCTGGTACCATTATTCAATTAGATATGTTACAT
AGGATGTGCCAACAAATTACTTTTATAACCAATAATTCCATGATTTTGCTTGGGTAATCCCTTTTAATGGTGACTG
AAATCATGACTGACCGAGTCAGTGGCTAGAAAAGGGGCTTTGCCTTTGTAACTTTTGATGACCATGACTCCGTCG
ATAAGATTGTCATTTCAGAAATACCATACTGTGAATGACCACAACCTGTGAAGTTAGGAAAGCCCTGTCAAAGCAAG
AGATGGCTAGTGCTTCATCCAGCCAAAGAGGTCGAAGTGTTCTGGAAACTTTGGTGGTGGTTCGTGGAGGTGGTT
TCAGTGGGAATGACAACCTTTGGTATTGGAGGAACTTCAGTGGTCTTGGTGGCTTTGGTGGCAGTCGTGGTGGTG
GTGGATATGGTGGCAGTGGGGATGGCTGTAATGGATTTGGTAATGATGGAAGCAATTTTGGAGGTGGTGGAGCT
ACAATGATTTTGGCAATTACAACAATGAGTCTTCAAATTTTGGACCCATGAAGGGAGGAAATTTTGGAGGCAGAA
GCTCTGGCCCTGTGGCAATGGAGGCCTATACTTTGCAAACCATGAAACCAAGGTGGCTATTGGCGGTTCCAGC
AGCAGCAGTAGCTATGGCAGTGGCAGATTTTAATTAGGAAACAAAGCTTAGCAGGAGAGGAGAGCCAGAGAAATG
ACAGGGAATCTACAGGTTACGACAGATTTGTGAAGTCAAGCAAGCAGTGGTGGCAGGGCCTAGCTGCTACAAA
GAAGACATGTTTTAGACAAATACTCATGTGTATGGGCAAAAACTCGAGGACTGTATTTGTGACTAACTGTATAA
CAGGTTATTTTAGTTTCTGTTCTGTGGGAAGTGTAAGCATTCCAGCTAAGGGTTTTAATATAGGTTTTTTTTTT
GCACCCATGCTGTTGATTGCTAAATGTAATAGTCTGATCATGACGCTGAATAAATGTCTTTTGTTTTAATGTGCT
GTGTAAAGTTAGTTTACTCTGAAGCTATCTTGGTAAATTTCCCCAACAGTGTGAAGTTAGAATTCCTTCAGGGTG
ATGCCAAGTTCTATTTGGAATTTATATACAACCTGCTTGGGTGGAGAAGCCATTGTCTTCAGAAACCTTTGGTGT
AGTTGAAGTATAGTTACTGTTGTGACCTGAAG

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FIGURE 2938

MASASSQRGRSGSGNFGGGRGGGFSGNDNFGIGGNFSGLGGFGGSRGGGGYGGSGDGCNGFGNDGSNFGGGGSY
NDFGNYNNESSNFGPMKGGNFGGRSSGPCGNGGLYFAKP

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FIGURE 2939

GTCTGGGTGGGGCCTGGGAGCCACAGGAGATGCCCAAAGCCAGGCAGAGCCCGGGGGCGAGGGGACGGCAGGCAG
GTGTGGCGCTGCCCTGGGCGGGCTTGACCCCCACACCAAGTGAGCGGCCTGCTCACTCCTCAGCTGCAGGAGC
CAGACGTGTGGAGTCCCAGCAGAGGCCAACCTGTGTCTCTTCATCTCCCTGGGAAAGGTGCCCCGAGGTGAAAG
AGATGGCCTGGTGGAAATCCTGGATTGAACAGGAGGGTGTACAGTGAAGAGCAGCTCCCCTTCAACCCAGACC
CTGATGCAGAGACCCTCTACCAAGCCATGAAGGGGATCGGGACCAACGAGCAGGCTATCATCGATGTGCTCACCA
AGAGAAGCAACACGCAGCGGCAGCAGATCGCCAAGTCCTCAAGGCTCAGTTCGGCAAGGACCTCACTGAGACCT
TGAAGTCTGAGCTCAGTGGCAAGTTTGAGAGGCTCATTGTGGCCCTTATGTACCCGCCATACAGATACGAAGCCA
AGGAGCTGCATGACGCCATGAAGGGCTTAGGAACCAAGGAGGGTGTATCATTGAGATCCTGGCCTCTCGGACCA
AGAACCAGCTGCGGGAGATAATGAAGGCGTATGAGGAAGACTATGGGTCCAGCCTGGAGGAGGACATCCAAGCAG
ACACAAGTGGCTACCTGGAGAGGATCCTGGTGTGCCTCCTGCAGGGCAGCAGGGATGATGTGAGCAGCTTTGTGG
ACCCAGGACTGGCCCTCCAAGACGCACAGGATCTGTATGCGGCAGGCAGAAAGATTCTGTTGGGACTGATGAGATGA
AATTCATCACCATCCTGTGCACGCGCAGTGCCACTCACCTGCTGAGAGTGTGTTGAAGAGTATGAGAAAATTGCCA
ACAAGAGCATTGAGGACAGCATCAAGAGTGAGACCCATGGCTCACTGGAGGAGGCCATGCTCACTGTGGTGAAAT
GCACCCAAAACCTCCACAGCTACTTTGCAGAGAGACTCTACTATGCCATGAAGGGAGCAGGGACGCGTGATGGGA
CCCTGATAAGAAACATCGTTTTCAAGGAGCGAGATTGACTTAAATCTTATCAAATGTCACTTCAAGAAGATGTACG
GCAAGACCCTCAGCAGCATGATCATGGAAGACACCAGCGGCGACTACAAGAACGCCCTGCTGAGCCTGGTGGGCA
GCGACCCCTGAGGCACAGAAGAACAAGAGCAAAGACCATGAAGCCAGAGTCTCCAGGACTCCTCACTCAACCTCG
GCCATGGACGCAGGTTGGGTGTGAGGGGGGTCCCAGCCTTTCAGTCTTCTATTTCCCTATTTCCAGTGCTTTCCA
GCCGGGTTTTCTGACCCAGAGGGTGGAACCGGCCTGGACTCCTCTCCCAACTTCTCCAGGTCATTTCCAGTGT
GAGCACAATGCCAACCTTAGTGTTTTCTCCAGCCAGACAGATGCCTCAGCATGAAGGGCTTGGGGACTTGTGGATC
ATTCTTCTCTCCCTGCAGGAGCTTCCCAAGCTGGTCACAGAGTCTCCTGGGCACAGGTTATACAGACCCAGCCC
CATTCCCATCTACTGAAACAGGGTCTCCACAAGAGGGGCCAGGGAATATGGGTTTTTAACAAGCGTCTTACAAAA
CACTTCTCTATCATGCAGCCGGAGAGCTGGCTGGGAGCCCTTTTGTGTTTAGAACACACATCCTTCAGCAGCTGAG
AAACGAACACGAATCCATCCCAACCGAGATGCCATTAACATTATCTAAAAATGTTAGGCTCTAAATGGACGAAA
AATTCTCTCGCCATCTTAATAACAAAATAAACTACAAATTCCTGACCCAAGGACACTGTGTTATAAGAGGCGTG
GCTCCCTGGTGGCTGACCAGGTCAGCTGCCCTGGCCTTGACCCCTCTGCATGCAGCACAGAAGGGTGTGACCA
TGCCCTCAGCACCCTCTTGTCCCACTGAACGGCAACTGAGACTGGGTACCTGGAGATTCTGAAGTGCCTTTC
TGTGGTTTTCAAATAATAAAGATTTGTATTTC

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FIGURE 2940

MAWWKSWIEQEGVTVKSSSHFNPDPDAETLYKAMKGIGTNEQAIIDVLTIKRSNTQRQQIAKSFKAQFGKDLTETL
KSELGKFERLIVALMYPPYRYEAKELHDAMKGLGTKEGVIIIEILASRTKNQLREIMKAYEEDYGSSLEEDIQAD
TSGYLERILVCLLQGSRDDVSSFVDPGLALQDAQDLYAAGEKIRGTDEMKFITILCTRSATHLLRVFEEYEKIAN
KSIEDSIKSETHGSLEEAMLTVVKCTQNLHSYFAERLYYAMKGAGTRDGTILRNIVSRSEIDLNLKCHFKKMYG
KTLSSMIMEDTSGDYKNALLSLVGSDP

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FIGURE 2941

GAATTTCCGTTTCCGGCGGTGTCCAAGCGGACCTAAGGAGTCGCAGTTGTGAACAGGTTAGAGTTACTTGTATT
GGTAAATAGCCACTATGGAGACTAAGGACCAGAAGAAACACAGAAAGAAAAACGGTGGACCCAAAGCTGCAAAGA
AAAAGAAGTGGCATCTGCAGGATCTCCAGCTAGGAGACTAAGAAAATGCCAGAAGAGAAATGCCAATGCTTTTG
CAGTTCAGTCTGCTGTGTGGATGTCTCGATCCTTTACAGGACTCTGGATTTGAAGACACAAAAGCATCATATT
CAGTGGTTGATGGAACCTCCACTAGAGCCGCCACCAATACCGGTAGTGGTGACGGGGCTCCAAAGTTGGAAAGAG
CACTTTGATATAATGCCTCATTCCGGAACCTTACCTGGCAGAAGTTCACCGAGATCAGAGGCCCTGTGACGATCGT
GTCAGGTAAAAAGCGCAGACTCACCATTATTGAATGTGGGTGTGACATTAACATGATGATTGATCTGGCTAAAGT
AGCAGATCTGGTACTGATGCTTATAGATGCCAGCTTTGGGTTTGAAATGGAAATGTTTGAGTTTCTAAACATCTG
TCAAGCACATGGCTTTCTTAAATTTCTGGGAGTTCTCACCCACCTCGACTCCTTCAAGCATAACAAGCAACTGAA
GAAGACAAAGAAGCGATTAAACACAGGTTCTGGACAGAAGTTTACCAGGTTGCCAAACTGTTCTACCTTTCTGG
AATGGTGCATGGAGAATATCAAACCAAGAAATCCACAATCTGGGCCATTTTATTACAGTTATGAAGTTTAGGCC
TCTCATGGCAAACTTTTACCCTTATATCCTGGCAGACAGGATGGAAGATTTGACAAACCCGGAGGATATCCAAA
CAAACATCAAATGTGACCGGCAGGTGTCACTTTATGGTTATTTAAGAGGAGCACACTTCAAAGATAAAAGCCAAA
TTCACATGCCAGGACAAGGTGGGGCTCACCCATGAGCTGGTCCAGAGTCTCATCTCCACCTACTCCACCATTGAT
GCCAAGATGGCTTCAAGTCGAGTGACGCTGCTTTCCAATTCAAACCACTTGGGTCAGAGGCTATAGATAATCAA
GGGTAAGTCTGCTTTTTTTTCTATTTTAAATAAAAAGATATATTACAGAA

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FIGURE 2942

CGTGTGCACCCTAGCGTCAGCCTCGAGTTTGACCAGCAACAGGGGTCGGTGTGTCCCTCTGAATCTGAGATCTAT
GAGGCAGTAGCTGGGGACAGGATGGCAGGAGCGCCCATGGCTGCTGCTGTGCAGCCTGCTGAGGTGACTGTTGAA
GTTGGTGAGGACCTCCACATGCACCACGTTTCGTGACCGGGAGATGCCTGAAGCTTTGGAGTTTAACCTTTCTGCC
AATCCAGAGGCAAGCACAATATTCCAGAGGAACTCTCAAACAGATGCTTTGGAGTTTAACCTTCTGCCAATCCA
GAGGCAAGCACAATATTCCAGAGGAACTCTCAAACAGATGGTGAGACGACATTGTTTTTCCGCCAAGAGAAAGA
ATAAAAGCTCTTGTTTGATCAGGTT

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FIGURE 2943

MAGAPMAAAVQPAEVTVEVGEDLHMHVDRDREMPEALEFNLSANPEASTIFQRNSQTDALFNPSANPEASTIFQ
RNSQTDGETTLFFPPRERIKALV

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FIGURE 2944

GGTAAATAGCCACTATGGAGACTAAGGACCAGAAGAAACACAGAAAGAAAAACAGTGGACCCAAAGCTGCAAAGA
AAAAGAAGTGGCATCTGCAGGATCTCCAGCTAGGAGACGAAGAAAATGCCAGAAAGAGAAATGCCAATGCTTTTG
CAGTTCAGTCTGCTGTGTGGATGTCTCGATCCTTTACAGGACTCTGGATTGAAGACACAAAAGCATCATATTC
CAGTGGTTGATGGAACCTCCACTAGAGCCGCCACCAATACCGGTAGTGGTGACGGGGCCTCCAAAGTTGGAAAGAG
CACTTTGATATAATGCCTCATTTCGGAACCTCACCTGGCAGAAGTTCACCGAGATCAGAGGCCCTGTGACGATCGT
GTCAGGTAAAAGCGCAGACTCACCATTATTGAATGTGGGTGTGACATTAACATGATGATTGATCTGGCTGAAGT
AGCAGATCTGGTACTGATGCTTATAGATGCCAGCTTTGGGTTTGAAATGGAAATGTTTGAGTTTCTAAACATCTG
TCAAGCACATGGCTTTCTAAATTTCTGGGAGTTCTCACCACCTCGACTCCTTCAAGCATAACAAGCAACTGAA
GAAGACAAAGAAGCGATTAAAACACAGTTCTGGACAGAAGTTTACCAGGTTGCCAAACTGTTCTACCTTTCTGG
AATGGTGCATGGAGAATATCAAAACCAAGAAATCCACAATCTGGGCCATTTTATTACAGTTATGAAGTTTAGGCC
TCTCATGGCAAACTTTTACCCCTTATATCCTGGCAGACAGGATGGAAGATTTGACAAACCCGGAGGATATCCAAA
CAAACATCAAATGTGACCGGCAGGTGTCACCTTTATGGTTATTTAAGAGGAGCACACTTCAAAGATAAAAGCCAAA
TTCACATGCCAGGACAAGGTGGGGCTCACCATGAGCTGGTCCAGAGTCTCATCTCCACCTACTCCACCATTGAT
GCCAAGATGGCTTCAAGTCGAGTGACGCTGCTTTCCAATTCCAACCCTTGGGTCAGAGGCTATAGATAATCAA
GGGTAAGTCTGCTTTTTTTCTATTTTAAATAAAAAGATATATTACAGAA

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FIGURE 2945

ATGGGGCAGCCGAGAGAGTTCTGGCATCTCAGGTCCCAGGTTCCAGTTCCAACCTGCCACCTGCTCACC GTGCAG
CCTTG GTGCTGCTTCCTCACCCACCCAGCTGGAGGGCGTGAGCGCAGGCACAGTGCTTCCTCCCTGCTTGCG
GCTCTGTGCTGAGGAAGGCGGTTCTGCGGCCCATCCTGCTGCTGCTGCTGGAGTTGGAGGGTGTGTGGTCTT
TCCTCTGGGCGGATGAAGGCTCCCTTGAGGGCGGCTGGCTCTGGGGACAGGGCCAGCTCCCACGAAGCTGCAG
CTTCTCCATGACTGGCAGAGCGAGCCTGGGCGAGTGCTGGCAGCAAGGCCCTTCTCCGCTCTCTTCCCGGCA
GGCATTCCCTCGTCCAGCACCTGATGACCGTCTCATCCGCAAAACAGCCAGCTCTTACGGCACCGGTCCCG
GAAGGGCCACCTCCCCGCGCGGGGGCTGCAATGCGCAGTGGGGTGGGGCTCCGAGGAGGTCACCAGGGACAGC
CAAGGAGAGCCCGGCGGCCCGGCTGCCGCGCACAGGACCTCTTCCCTGGACGGGGCGGCGCTGGCGGTGCTC
TCCAGAACAGCCCCACGGGGCGGGGAGCCGTTGCAGCCCTGGGAAGAAGGTGCAGACCCTGCCAGTTGGAAG
TCCTCCTTCCGGCAGCCGAGGTCCCTATCGGGAAGCCGAAGGGGGCGGCTCATCCCTGGAGGTGCCCATCATC
TCCTCCGGCGGGAAGTGGCTTATGAACGGGCTGTCTCCCTGCGCGGACACCGCCGGGCTCGTCGGGAGACCGG
CTCAAGGACTCGGGCTCCGTGCAGAGACTCTCCACCTACGACAATGTGCCGCGCGGGCTGGTCCCCGGCATA
CCCAGCGTGGCCAGTATGGCGTGGTCCGGGGCTCGTCCAGCGAGTCGTGCTGGGGGGCTCACTCAGCAGCTGC
ACGGCCTGCCGCGCCAGCGACTCGTCTGCCCGAGTTCCCTGCACACCGACTGGGCCCTGGAGCCCTCCCCGCTC
CCCAGCAGCAGCGAGGACCCCAAGTCCCTGGACCTGGACCACAGCATGGACGAGGCGGGCGGGTGCCAGCAAC
AGCGAGCCAGCGAGCCGACAGCCCCACCCGGGAACACGCGCGCCGCTCCGAGGCCTTACAGGGGCTGGTCACT
GAGCTCAGGGCCGAGCTGTGCCGCCAGCGGACTGAGTACGAGAGGAGTGTGAAAAGAATCGAAGAAGGGAGTGCT
GACCTGAGAAAACGAATGTCCCGTTAGAAGAAGAACTGGACCAGGAAAAGAAAAATACATCATGCTGGAAATA
AAGCTGCGGAAGTCTGAACGGGCGCGGGAGGATGCGGAGAGGAGGAACCAGCTGTTGCAGAGGGAAATGGAGGAG
TTTTTTTGCACCCTAGGAAGCTTGACTGTTGGGGCAAAGGTGCCAGGGCCCCAAAGTAAAAGGAATGGCAGAGC
TCACTTCTGTACCACGTCTGCTGGTCTCCAGCCTTGATGGAGTTAGAAGCGTCTGTATCTCTGGAGCAGCCAGG
CGCTCTGGAGCCAGCTGGAGAGAGAGATCCTGATACCTCTGTGGGACTGTGGGGACTTTTGGGACCCACAC
ACTCCAGGTGGGATCAGATGCTGCTCCAACCATGCAGTTCCTGGTGAGGGTCAGAAGGGGACGGTACCAAGAGCA
GCGCTTAGCCCTTACCCAGGAAATATCCTTCATGGCCACAGAAATGGAGGGCGCCAGGATCCAGGCAGCCACCG
GGAACAGTCAGCTTTCTTTATTAAATGTGCTCACAAAGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2946

MGQPREFWHLRSQVPVPTCHLLTVQPWCLLPHTPAGGRERRHSASSLLAALCLRKAVLRPHPAVLPGVGGCVVL
SSGRMKAPLRGGLALGTGPAPTKLQLLDHWQSEPGPSGWQQGPSPLFPAGTSLVQHLMTVLIRKHSQLFTAPVP
EGPTSPRGGLQCAVGWGSEEVTRDSQGEPPGPGLPARTSSLDGAAVAVLSRTAPTGPGRCSPPGKKVQTLPSWK
SSFRQPRSLSGSPKGGGSSLEVPIISSGGNWMNGLSSLRGHRASSGDRLKDSGSVQRLSTYDNVPAPGLVPGI
PSVASMASGASSSESVGGSLSSCTACRASDSSARSSLHTDWALEPSPLPSSSEDPKSLDLDSMDEAGAGASN
SEPSEPDSPTREHARRSEALQGLVTELRAELCRQRTYERSVKRIEEGSADLRKRMSRLEEELDQEKKKYIMLEI
KLRNSERAREDAERRNQLLQREMEEFFSTLGSLTVGAKGARAPK

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FIGURE 2947

GGAGGAGGCAAGAGCCGACGCGAGGGGAGGGGAGCGCAGCGGGCGGGGCTAACGGGCGGGCAAGCGGGCGGGCGGC
AACAGCATGTCCCTCGGCCAGCGCGGGCGGCCTCTTAGCGCGGGCGGGGCTGCTCTGGGCGCGCCCCGGGC GAAG
TGCGCCAGTCTCCGGCCCCGGCCCCCTCGGCGCGCCCCGACTTCCC GGCGCCCCCTGAGCCCAGCAGCCGCGGGTC
CCGGGATCGGCTAAGAGTAGCTGCAACGCCTCGCCGACGGAGTCCTTTCCCTTTCCCGGGACGCTGGGCCATGAG
CTCCGCGGGCCACCTGAGGCACAGGGGAGTCTGCTCGGCCAGGACAGCCTCCCCGAAGTCCCGCTGCCCTCGCCT
CTGCACTGCGGGACGCCAGCGCTCGGCCCTGGCGGAGGCGTCTTCGGAAGAGCATCGGGGTGGGGGCATGGAATC
CGCGGAACCTGCGGGCCAGGCCCGGGCGGGCCACCAAGCTGTGCGAGGCTGTGGGCGCGGGCGTGCAGGAGCC
CCGGCGGCAGAGGCGCCTGGTGCTTGTTATCGTGTGCGTGGCGCTGTTACTGGACAACATGCTGTACATGGTCAT
CGTGCCCATAGTGCCGACTACATCGCCACATGCGCGGGGGCGGGCAGGGGCCACCCGGACTCCCAGGTTGTG
GGAGCCCACCCTGCCGCTGCCACTCCGGCCAATGCCAGCGCCTACACGGCCAACACCTCGGCGTCCCCGACAGC
TGCGTGGCCAGCGGGCTCAGCCCTTCGGCCCCGCTACCCTACGGAGAGCGAAGACGTGAAGATCGGGGTGCTGTT
TGCTTCCAAGGCTATCCTGCAGCTGCTAGTGAACCCCTTGAGCGGGCCCTTCATCGACCGCATGAGCTACGACGT
GCCGCTGCTGATCGGCCTGGGCGTCATGTTGCGCTCTACAGTCTGTTGCGCTTCGCCGAGGACTACGCCACGCT
GTTGCGGGCGCGCAGCCTGCAGGGCCTGGGCTCAGCCTTCGCCGACACGTCTGGCATAGCCATGATCGCCGATAA
GTACCCGGAGGAGCCGGAGCGCAGTCGTGCACTGGGCGTGGCGCTGGCCTTCATTAGCTTCGGAAGCCTAGTGGC
CCCGCCCTTCGGGGGCATCCTCTATGAGTTGCGCGCAAGCGCGTGCCTTCTTGGTGCTAGCTGCCGTGTGCT
CTTTGACGCGCTGTTGCTGCTGGCAGTGGCCAAACCCCTTCTCGGCGGCTGCACGGGCTCGGGCCAACCTGCCAGT
GGGCACTCCCATCCACCGCCTCATGCTAGACCCCTACATTGCCGTGGTGGCCGGCGCGCTCACCACCTGTAACAT
TCCCCTCGCCTTCTCGAACCACCATTGCCACGTGGATGAAGCATACGATGGCGGCTTCCGAGTGGGAGATGGG
CATGGCCTGGCTGCCGGCCTTCGTGCTCATGTGCTGGGCGTCTACCTCACCCTGCGCCTGGCGGGCGCGCTACCC
ACACCTGCAGTGGCTGTACGGCGCGCTTGGGCTGGCTGTGATCGGCGCCAGCTCGTGATCGTGCCCGCCTGCCG
CTCCTTCGCGCCGCTAGTGGTCTCACTATGCGGCCTCTGTTTTGGCATAGCCCTAGTCGACACAGCACTGCTGCC
CACGCTCGCCTTCTTGGTGGACGTGCGCCATGTCTCAGTCTATGGCAGCGTCTACGCCATCGCCGACATCTCCTA
TTCGGTGGCCTACGCGCTCGGGCCCATAGTGGCAGGCCACATTGTGCACTCGCTGGGCTTTGAGCAGCTCAGCCT
TGGCATGGGACTGGCCAACCTGCTCTATGCTCCCGTCTTGCTGCTGCTCCGCAACGTGGGCCTCCTGACGCGCTC
CCGTTCCGAGCGCGATGTGCTGCTTGATGAGCCACCGCAAGGTCTGTACGATGCGGTGCGCCTGCGTGAGCGTCC
TGTGTCTGGCCAGGACGGCGAGCCTCGCAGCCCGCCTGGCCCTTTTGATGAGTGCGAGGACGACTACAATACTA
CTACACCCGCAGCTAGCATCCCCACTCCTCCTCCAGCCCCACCAACCGCCTTGGGTCAAGGGGGCTGCTCTGCAA
GCCCAGTGGCCAGCTCTGGCTCAGGGCCACCTCCTCCAGCGAGTACCCAGCCACTCCTCAACCTTGACTTCTG
CCCAAATCCCCTCCCTGTGACCCGTTCCATATCCCTTTCTCTTGTCCAATGGGGCTTGGAGCACCGAGGCCAG
CGAAGCCATCGCGCTCCTTGCGGAGGTGAAGAGGACCCTGAGTCCCCACCTGCGGCTCCCCCTGTGTAGAGCCTGC
ATCTGCTGTCTCTTCTTCCATTGCTCCAGTGCCAAACTTGGGCGGCTGCACCGCGGCGCCTCCGCCCAAATCA
ATAAACTGTGTCTGTCCCAGG

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FIGURE 2948

MESAEPAGQARAAATKLSEAVGAALQEPRRQRLVLVIVCVALLLDNMLYMVIVPIVPDYIAHMRGGGEGPTRTP
EVWEPTLPLPTPANASAYTANTSASPTAAWPAGSALRPRYPTESEDKIGVLFASKAILQLLVNPLSGPFIDRMS
YDVPLLLIGLGVMFASTVLFafaedyatlfaarslqglgsafadtsgiamiadkyPEEPERSRALGVALAFISFGS
LVAPPFGGILYEFAGKRVFPLVLAAVSLFDALLLLAVAKPFSAAARARANLPVGTPIHRLMLDPYIAVVAGALT
CNIPLAFLEPTIATWMKHTMAASEWEMGMAWLPAFVPHVLGVYLTVRLAARYPHLQWLYGALGLAVIGASSCIVP
ACRSFAPLVVSLCGLCFGIALVDTALLPTLAFLVDVRHVSVYGSVYAIADISYSVAYALGPVAGHIVHSLGFEO
LSLGMGLANLLYAPVLLLLLRNVGLLTRSRSERDVLLEPPQGLYDAVRLRERPVSQGDEPRSPPGPFDECEDDY
NYYYTRS

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FIGURE 2949

GGCACGAGCTCGGCTCCTGGAAAGATCGAGGCAGCGGAGACAGAGGCGGAAGCTGCAGCCCTAGAGGTCCTGGCT
GAGGTGGCAGGCATCTTGGAACCTGTAGGCCTGCAGGAGGAGGCAGAACTGCCAGCCAAGATCCTGGTTGAGTTT
GTGGTGGACTCTCAGAAGAAAGACAAGCTGCTCTGCAGCCAGCTTCAGGTAGCGGATTTCTGCAGAACATCCTG
GCTCAGGAGGACACTGCTAAGGGTCTCGACCCCTTGGCTTCTGAAGACACGAGCCGACAGAAGGCAATTGCAGCT
AAGGAACAATGGAAAGAGCTGAAGGCCACCTACAGGGAGCACGTAGAGGCCATCAAAATTGGCCTCACCAAGGCC
CTGACTCAGATGGAGGAAGCCCAGAGGAAACGGACACAACCTCCGGGAAGCCTTTGAGCAGCTCCAGGCCAAGAAA
CAAATGGCCATGGAGAAACGCAGAGCAGTCCAGAACCAGTGGCAGCTACAACAGGAGAAGCATCTGCAGCATCTG
GCGGAGGTTTTCTGCAGAGGTGAGGGAGCGTAAGACAGGGACTCAGCAGGAGCTTGACAGGGTGTTTCAGAACTT
GGAAACCTGAAGCAGCAGGCAGAACAGGAGCGGGACAAGCTGCAGAGGTATCAGACCTTCTCCAGCTTCTGTAT
ACCTTGAGGGTAAGCTGTTGTTCCCTGAGGCTGAGGCTGAGGCAGAGAATCTTCCAGATGATAAACCCAGCAG
CCGACTCGACCCAGGAGCAGAGTACAGGAGACACCATGGGGAGAGACCCTGGTGTGTCCTTCAAGGCTGTGGT
CTACAACCTGCTGGAGATGTAAATTTGCCATGACTTCTCGAGGACAGCAGCATGGAGAAAAGATCCTAGAAAAGG
TCAGACCCAACTCAGGCCTTGGTGTCCCTGGACTGCAAGTGTGGAAGGAGGGAAAGCCTGGTTTACCTCTCTCTG
CATCTGAGCTCTGCTACCCATGGAGCAGATGGATGGTGGGAACAGGAAAGAGCTTATGTTACACCTCATTCCCAT
GCTTAGCCCAACCAGAGCTAACCCCTGTCTTCTTCCCCAGGCCTCTGACTTCCCTCACCTCCCAACCATCATTAC
AGGAAAGACTGTGAACTCCTGAGTTCAGCTTGATTTCTGACTACATCCAGCAAGCTCTGGCATCTGTGGATTAA
AATCCCTGGATCTCTCTCAGTTGTGTATTTGTTTCATCTTCATATGCTGGCAGGAACAACATTAATACAGATACT
CAGAAGCCAATAACATGACAGGAGCTGGGACTGGTTTGAACACAGGGTGTGCAGATGGGGAGGGGGTACTGGCCT
TGGGCCTCCTATGATGCAGACATGGTGAATTTAATTCAAGGAGGAGGAGAATGTTTTAGGCAGGTGGTTATATGT
GGGAAGATAATTTTATTTCATGGATCCAAATGTTTGTGAGTCCTTTTGTGCTAAGGTTCTTGCGGTGAACCAGAA
TTATAACAGTGAGCTCATCTGACTGTTTTAGGATGTACAGCCTAGTGTTAACATTCTTGGTATCTTTTTGTGCCT
TATCTAAAACATTTCTCGATCACTGGTTTCAGATGTTTATTATTATTCTTTTCAAAGATTCAGAGATTGGCT
TTTGTATCCACTATTGTATGTTTTGTTTCATTGACCTCTAGTGATACCTTGATCTTCCCACTTTCTGTTTTCG
GATTGGAGAAGATGTACCTTTTTTGTCAACTCTTACTTTTATCAGATGATCAACTCACGTATTGGATCTTTATT
TGTTTTCTCAAATAAATATTTAAGGTTAAAAA

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FIGURE 2950

MEAAETEAEAAALEVLAEVAGILEPVGLQEEAELPAKILVEFVVDSSQKKDKLLCSQLQVADFLQNILAQEDTAKG
LDPLASEDTSRQKAIAAKEQWKELKATYREHVEAIKIGLTKALTQMEEAQRKRTLREAFELQAKKQMAMEKRR
AVQNQWQLQQEKHLQHLAEVSAEVRERKTGTQQELDRVFQKLGNLKQQAEQERDKLQRYQTFLQLLYTLQGKLLF
PEAEAEAEENLPDDKPQQPTRPQEQSTGDTMGRDPGVSFKA VGLQPAGDVNLP

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FIGURE 2951

GATCGCGGAGTCGGTGCTTTAGTACGCCGCTGGCACCTTTACTCTCGCCGGCCGCGCGAACCCGTTTGAGCTCGG
TATCCTAGTGACACGCCTTTGCAAGCGACGGCGCCATGAGTCTGACTTCCAGTTCCAGCGTACGAGTTGAATGG
ATCGCAGCAGTTACCATTGCTGCTGGGACAGCTGCAATTGGTTATCTAGCTTACAAAAGATTTTATGTTAAAGAT
CATCGAAATAAAGCTATGATAAACCTTCACATCCAGAAAGACAACCCCAAGATAGTACATGCTTTTGACATGGAG
GATTTGGGAGATAAAGCTGTGTACTGCCGTTGTTGGAGGTCCAAAAAGTCCCATTTCTGTGATGGGGCTCACACA
AAACATAACGAAGAGACTGGAGACAATGTGGGCCCTCTGATCATCAAGAAAAAAGAACTTAAATGGACACTTTT
GATGCTGCAAATCAGCTTGTCGTGAAGTTACCTGATTGTTTAAATTAGAATGACTACCACCTCTGTCTGATTCACC
TTCGCTGGATTCTAAATGTGGTATATTGCAAACTGCAGCTTTCACATTTATGGCATTGTCTTGTGAAACATCG
TGGTGCACATTTGTTTAAACAAAAAAAAAAAAAAAAA

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FIGURE 2952

MSLTSSSSVRVEWIAAVTIAAGTAAIGYLAYKRIFYVKDHRNKAMINLHIQKDNPKIVHAFDMEDLGDKAVYCRCW
RSKKFPFCDGAHTKHNEETGDNVGPLIIKKKET

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FIGURE 2953

GGAAAGAAGGCCAAGGGAAAGAAGGTGGTTCCGGCCCCTGCTGTCATGAAAGAAGCAGGAGGCTAAGAAAGTGGTG
AATCCCCTGTTTGAAGAACGGCCTAAGAATTTTGGCATTGGACAGGACATCCAGCCCCAAAGACACTTCACCCGC
TTTGTGAAATGGCCCTGCTATATCAGGTTGCAGCGGCAGAGAGCCATCCTCTATAAGGGGCTGAAAGTGCCTCCT
GCGATTAACCAAGTTCACCCAGGCCCTGGACCGCCAAACAGCTACTCAGCTGCTTAAGCTGGCCCCACAAGTACAGA
CCAGAGACAAAAGACACTTTGGCTAAGCTGGTGGAAGCTATCAGGACCAATTACAACGACAGATACAGATACGAT
GAGATCCGCTGTCACTGGGGCAGCAACGTCCTGGGTCCTAAGTCCGTGGCTCGTATCGCCAAGCTCGAAAAGGCA
AAGGCTAAAGAAGTGGCCACTAACTGGGTTAATGTACACTGTTGAGTTTTCTGTACATAAAAAATAATTAAAT
AA

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FIGURE 2954

MKKQEAKKVVNPLFEKRPKNFGIGQDIQPKRHFTRFVKWPCYIRLQRQRAILYKGLKVPPAINQFTQALDRQTAT
QLLKLAKHYRPETKDTLAKLVEAIRTNYNDRYRYDEIRCHWGSNVLGPKSVARIAKLEKAKAKELATKLG

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FIGURE 2955

CCGTTGTGGCGAGCGCTACACGAGGCAAACGACTTCTCCCTTCTTTGAACTGGACCCCGCGAGCACCAGAGTCGG
CGTAACTATCGCCTGACAGGCATTTAAATCAAACGGTATTGAGATGGATTGGGTTATGAAACATAATGGTCCAAA
TGACGCTAGTGATGGGACAGTACGACTTCGTGGACTACCATTTGGTTGCAGCAAAGAGGAAATAGTTCAGTTCTT
TCAAGGGTTGGAAATCGTGCCAAATGGGATAACATTGACGATGGACTACCAGGGGAGAAGCACAGGGGAGGCCTT
CGTGCAGTTTGCTTCAAAGGAGATAGCAGAAAATGCTCTGGGAAACACAAGGAAAGAATAGGGGCACAGGTATAT
TGAGATCTTCAGAAGTAGCAGGAGTGAAATCAAAGGATTTTATGATCCACCAAGAAGATTGCTGGGACAGCGACC
GGGACCATATGATAGACCAATAGGAGGAAGAGGGGGTTATTATGGAGCTGGGCGTGGAAGTATGTATGACAGAAT
GCGACGAGGAGGTGATGGATATGATGGTGGTTATGGAGGTTTTGATGACTATGGTGGCTATAATAATTACGGCTA
TGGGAATGATGGCTTTGATGACAGAATGAGAGATGGAAGAGGTATGGGAGGACATGGCTATGGTGGAGCTGGTGA
TGCAAGTTCAGGTTTTTCATGGTGGTCATTTTCGTACATATGAGAGGGTTGCCTTTTTTCGTGCAACTGAAAATGACAT
TGCTAATTTCTTCTCACCCTAAATCCAATACGAGTTCATATTGATATTGGAGCTGATGGCAGAGCCACAGGAGA
AGCAGATGTAGAGTTTGTGACACATGAAGATGCAGTAGCTGCCATGTCTAAAGATAAAAAATAACATGCAACATCG
ATATATTGAACTCTTCTGAATTCTACTCCTGGAGGCGGCTCTGGCATGGGAGGTTCTGGAATGGGAGGCTACGG
AAGAGATGGAATGGATAATCAGGGAGGCTATGGATCAGTTGGAAGAATGGGAATGGGGAACAATTACAGTGGAGG
ATATGGTACTCCTGATGGTTTGGGTGGTTATGGCCGTGGTGGTGGAGGCAGTGGAGGTTACTATGGGCAAGGCGG
CATGAGTGGAGGTGGATGGCGTGGGATGTACTGAAAGCAAAAACACCAACATACAAGTCTTGACAACAGCATCTG
GTCTACTAGACTTTCTTACAGATTTAATTTCTTTTGTATTTTAAAGAACTTTATAATGACTGAAGGAATGTGTTTT
CAAAATATTATTTGGTAAAGCAACAGATTGTGATGGGAAAATGTTTTCTGTAGGTTTATTTGTTGCATACTTTGA
CTTAAAAATAAATTTTTTATATTCAAACCACTGATGTTGATACTTTTTATATACTAGTTACTCTAAAGATGTGCT
GCCTTCATAAGATTTGGGTTGATGTATTTTACTATTAGTTCTACAAGAAGTAGTGTGGTGTAAATTTTAGAGGATA
ATGGTTACCTCTGCGTAACTGCAAGTCTTAAGCAGACATCTGGAATAGAGCTTGACAAATAATTAGTGTAAC
TTTTTCTTTAGTTTCTCTCTGGACAACACTGTAAATATAAAGCCTAAAGATGAAGTGGCTTCAGGAGTATAAATTC
AGCTAATTATTTCTATATTATTATTTTCAAATGTCATTTATCAGGCATAGCTCTGAAACATTGATGATCTAAGA
GGTATTGATTTCTGAATATTTCATAATTGTGTTACCTGGGTATGAGAGTGTGGAGCTGAATTTCTAGCCCTAGAT
TTTGAGATAAAACCCCTTCAGCACTTGACCGAAATACCAAAAATGTCTCCAAAAAATTGATAGTTGCAGGTTATC
GCAAGATGTCTTAGAGTAGGGTTAAGGTTCTCAGTGACACAAGAATTCAGTATTAAGTACATAGGTATTTACTAT
GGAGTATAATTCTCACAATTGTATTTTTCAGTTTTCTGCCCAATAGAGTTTAAATAACTGTATAAATGATGACTTT
AAAAAATGTAAGCAACAAGTCCATGTATAGTCAATAAAAACAATCCTGCAGTTGGGTTTTGTATCTGATCCCT
GCTTGGAGTTTTAGTTTAAAGAATCTATATGTAGCAAGGAAAAGGTGCTTTTTAATTTTAAATCCCTTTGATCAAT
ATGGCTTTTTTCCAAATTGGCTAATGGATCAAAATGAAACCTGTTGATGTGAATTCAGTTATTGAACCTGTTACT
TGTTTTTGCCAGAAATGTTATTAATAAATGTCAATGTGGGAGATAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2956

MDWVMKHNGPNDASDGTVRLRGLPFGCSKEEIVQFFQGLEIVPNGIITLMDYQGRSTGEAFVQFASKEIAENALG
KHKERIGHRYIEIFRSSRSEIKGFYDPPRLLGQRPGPYDRPIGGRGGYYGAGRGSMDRMRGGDGYDGGYGGF
DDYGGYNNGYGNDFDDMRDGRGMGGHGYGGAGDASSGFHGGHFVHMRGLPFRATENDIANFFSPLNPIRVHI
DIGADGRATGEADVEFVTHEDAVAAMSKDKNNMQHRYIELFLNSTPGGGSGMGGSGMGGYGRDGMNDQGGYGSVG
RMGMGNNGYSGGYGTPDGLGGYGRGGGSGGYYGQGGMSGGGWRGMY

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FIGURE 2957

GCATGGCCAAGGCCGGGCGGCCGCTTGCCCCCGCTTCCTTTACGCTGTCGCTGCCCCGTAGGTGGTTGTGGCCA
CTGTGCCCCGAGGGAGGCGGCGGTGGCCAGTAATGCCTGGGAACTCCTCTGGGGGGACATTATGGAGCTGGAAG
CACCCTTGGAGGAGTCCGAGAGCCAGAAGAAGGAGAGGCCAAAAGAGTGACAGAAGGAAGTCAAGGCACCATTATG
ACTCGGATGAGAAATCAGAAACAAGAGAAAATGGTGTTACAGATGACCTGGATGCTCCCAAGGCCAAAAAATCTA
AAATGAAAGAGAAGCTAAATGGAGACACTGAAGAAGGATTTAATAGACTTTCAGATGAATTCTCCAAATCTCATA
AGTCAAGAAGAAAAGATCTACCAATGGAGATATAGATGAATATGAAAAAAATCAAAGCGAGTATCATCTTTAG
ATACTTCTACTCATAAATCAAGTGATAATAAACTAGAGGAGACCTTAACACGTGAACAGAAAGAAGGAGCCTTCT
CCAATTTTCTATTTCTGAAGAGACTATAAAGCTTCTGAAAGGTCGAGGGGTAAACATATCTCTTTCTTCTATTCAAG
TTAAGACCTTTGGTCTGTATATGAAGGAAAAGATTTAATAGCTCAAGCACGGACAGGAACAGGAAAGACATTCT
CTTTTGCCATCCCCTTAATTGAAAGACTCCAAAGAAATCAAGAAACAATTAAAAAAGCCGCTCACCAAAGGTAC
TTGTTTTGGCTCCAACAAGGGAAGTGGCAACCAAGTAGCCAAAGACTTCAAAGATATAACTAGGAAACTCAGCG
TGGCGTGTTTTTATGGTGGAACATCATATCAAAGCCAAATTAATCATATTCGAAATGGTATTGACATCTTGGTTG
GAACACCTGGTCGTATCAAAGACCATCTGCAGAGTGGCCGATTGGATCTTTCTAAACTGCGACATGTTGTGCTTG
ATGAAGTGGATCAGATGTTAGATTTAGGTTTTGCTGAACAAGTTGAAGATATTATTATCATGAATCCTACAAAAGT
ATTCTGAAGACAATCCTCAGACTTTACTTTTTTCTGCAACTTGCCACAGTGGGTATACAAAGTTGCAAAAAAAT
ACATGAAATCCAGATATGAACAGGTTGACCTTGTTGGAAAAATGACTCAAAGGCTGCAACTACTGTGGAACATT
TGGCCATCCAGTGTCAATTGGTCTCAGAGGCCAGCAGTTATTGGAGATGTCCTTCAAGTCTACAGTGGGTCTGAAG
GGAGGGCTATTATTTCTGTGAGACCAAGAAGAATGTAAGTGAATGGCCATGAATCCACACATAAAACAGAATG
CCCAGTGTTCATAGGGGACATTGCACAGTCACAAAGAGAAATTACACTAAAAGGCTTCAGAGAAGGTAGTTTTA
AAGTTTTGGTGGCAACCAATGTGGCTGCCCCGTGGTTTTGGACATTCCTGAAGTTGACCTGGTGATTCAAAGTTCTC
CTCCTCAGGATGTTGAGTCCTATATCCATCGCTCTGGACGCACAGGTAGAGCTGGACGGACAGGGATTTGTATAT
GTTTTTATCAACCAAGAGAAAGAGGTCAACTAAGATATGTGGAACAAAAAGCAGGAATTACTTTTAAACGTGTAG
GTGTTCTTCTACATGGATTTAGTTAAATCTAAAAGCATGGATGCCATCAGGTCTCTGGCTTCCGTTTTCTTATG
CTGCTGTTGATTTTTTCCGACCATCAGCTCAGAGACTGATAGAAGAGAAAGGTGCAGTGGATGCATTGGCTGCAG
CTTTAGCCACATTTCTGGTGCATCAAGCTTTGAACCACGATCTTTGATCACCTCTGATAAGGGGTTTTGTGACCA
TGACTCTGGAAAGCCTAGAGGAAATACAGGATGTCAGCTGTGCTTGGAAAGAACTTAACAGAAAGCTGAGTAGTA
ATGCAGTGTCTCAGATTACCAGAATGTGCCTCCTGAAAGGAAATATGGGTGTTTGCTTTGATGTTCTTACAACTG
AGTCAGAAAGGTTACAGGCAGAGTGGCATGATTCGACTGGATACTCTCAGTGCCAGCCAAATTACCTGAAATTG
AAGAATATTATGATGGAACACATCTTCTAATTCAGACAGAGGAGTGGCTGGTCAAGTGGTCGATCAGGCCGGT
CAGGCCGGTCAGGTGGTCGATCTGGCGGCCGGTCAGGTAGACAGAGTCGACAAGGAAGTCGCTCAGGAAGTCGAC
AAGATGGTAGAAGACGAAGTGGGAATAGAAATCGATCAAGAAGTGGGGGCCACAAACGGAGTTTTGACTGAGTAT
TTGATAGTTAATCTACCAGTGTGAGCTTGCTTATTTCTGCCTAATCATGTACATTATCCACCAAAAATTAGGTCA
TCATAGTTGAGGTATGTGTCTGCTATTTGCAAAGAAGTTGGTCGTATTTTTTTAAAAAGTATTTTCAAGAATGG
AACAAATCTACTTATCCAGTTATACCTTTGAATAAAAAAACCTCCTTTTATTGTCTCTTTTCAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 2959

CTACCTCTTCTCTCCACGCGGTTGAGAAGACCGGTCGGCCTGGGCAACCTGCGCTGAAGATGCCGGGAAAACCTC
CGTAGTGACGCTGGTTTGGAAATCAGACACCGCAATGAAAAAAGGGGAGACACTGCGAAAGCAAACCGAGGAGAAA
GAGAAAAAAGAGAAGCCAAAATCTGATAAGACTGAAGAGATAGCAGAAGAGGAAGAAACTGTTTTCCCAAAGC
TAAACAAGTTAAAAAGAAAGCAGAGCCTTCTGAAGTTGACATGAATTCTCTAAATCCAAAAAGGCCAAAAAGAA
AGAGGAGCCATCTCAAATGACATTTCTCTAAACCAAAAGTTTGAGAAAGAAAAAGGAGCCATTGAAAAGAA
AGTGGTTTCTTCTAAACCAAAAGTGACAAAAATGAGGAGCCTTCTGAGGAAGAAATAGATGCTCCTAAGCC
CAAGAAGATGAAGAAAGAAAAGGAAATGAATGGAGAACTAGAGAGAAAAGCCCCAACTGAAGAATGGATTTCC
TCATCTGAACCGGACTGTAACCCAGTGAAGCTGCCAGTGAAGAAAGTAACAGTGAGATAGAGCAGGAAATACC
TGTGGAACAAAAGAAGGCGCTTTCTCTAATTTTCCCATATCTGAAGAACTATTAACTTCTCAAAGGCCGAGG
AGTGACCTTCTATTTCTTATACAAGCAAAGACATTCCATCATGTTTACAGCGGGAAGGACTTAATTGCACAGGC
ACGGACAGGAAGTGGGAAGACATTCTCCTTTGCCATCCCTTTGATTGAGAACTTCATGGGGAAGTCAAGACAG
GAAGAGAGGCCGTGCCCTCAGGTACTGGTTCTTGACCTACAAGAGAGTTGGCAAATCAAGTAAGCAAAGACTT
CAGTGACATCACAAAAAGCTGTCAGTGGCTTGTTTTTATGGTGGAACTCCCTATGGAGGTCAATTTGAACGCAT
GAGGAATGGGATTGATATCCTGGTTGGAACACCAGGTCGTATCAAAGACCACATACAGAATGGCAAAGTATGATCT
CACCAAAGTTAAGCATGTTGTCTGGATGAAGTGGACCAGATGTTGGATATGGGATTTGCTGATCAAGTGAAGA
GATTTTAAAGTGTGGCATAAAGAAAGATTCTGAAGACAATCCCCAACATTGCTTTTTTCTGCAACTTGCCCTCA
TTGGGTATTTAATGTTGCCAAGAAATACATGAAATCTACATATGAACAGGTGGACCTGATTGGTAAAAAGACTCA
GAAAACGGCAATAACTGTGGAGCATCTGGCTATTAAGTGCCACTGGACTCAGAGGGCAGCAGTTATTGGGGATGT
CATCCGAGTATATAGTGGTCATCAAGGACGCACTATCATCTTTTGTGAAACCAAGAAAGAAGCCCAGGAGCTGTC
CCAGAATTCAGCTATAAAGCAGGATGCTCAGTCCTTGATGGAGACATTCACAGAAGCAAAGGGAAATCACCTT
GAAAGGTTTTAGAAATGGTAGTTTTTGGAGTTTTTGGTGGCAACCAATGTTGCTGCACGTGGGTAGACATCCCTGA
GGTTGATTTGGTTATACAAAGCTCTCCACCAAAGGATGTAGAGTCTTACATTATCGATCCGGGCGGACAGGCAG
AGCTGGAAGGACGGGGGTGTGCATCTGCTTTTATCAGCACAAAGGAAGAAATATCAGTTAGTACAAGTGGAGCAAAA
AGCGGGAATTAAGTTCAAACGAATAGGTGTTCTTCTGCAACAGAAATAATAAAAGCTTCCAGCAAAGATGCCAT
CAGGCTTTTGGATTCCGTGCCCTCCCACTGCCATTAGTCACTTCAAACAATCAGCTGAGAAGCTGATAGAGGAGAA
GGGAGCTGTGGAAGCTCTGGCAGCAGCACTGGCCCATATTTAGGTGCCACGTCCGTAGACCAGCGCTCCTTGAT
CAACTCAAATGTGGGTTTTGTGACCATGATCTTGAGTGCTCAATTGAAATGCCAAATATTAGTTATGCTTGGAA
AGAACTTAAAGAGCAGCTGGGCGAGGAGATTGATTCCAAAGTGAAGGGAATGGTTTTTCTCAAAGGAAAGCTGGG
TGTTTGCTTTGATGTACCTACCGCATCAGTAACAGAAATACAGGAGAAATGGCATGATTACGACGCTGGCAGCT
CTCTGTGGCCACAGAGCAACCAGAACTGGAAGGACCACGGGAAGGATATGGAGGCTTCAGGGGACAGCGGGAAGG
CAGTCGAGGCTTCAGGGGACAGCGGGACGGAACAGAAATCAGAGGACAGCGGGAAGGCAGTAGAGGCCCGAG
AGGACAGCGATCAGGAGGTGGCAACAAAAGTAACAGATCCCAAAACAAAGGCCAGAAAGCGGAGTTTCAGTAAAGC
ATTTGGTCAATTAATTAGAAATAGAAGATTTATATAGCAAAAGAGAAATGATGTTTGGCAATATAGAAGTGAACAT
TATTTTTCATGCAAAGTTAAAGCACATTGTGCCTCCTTTTGACCACTTGCCAAGTCCCTGTCTCTTTCAGACAC
AGACAAGCTTCATTTAAATTATTTTCATCTGATCATTATCATTATATACTTTATTGTTACTTCATCAGTTTTTCT
TTTGAAAGGTGTATGAATTCATTACATTTTTATTCTAATGTATTATCTGTAGATTAGAAGATAAAATCAAGCATG
TATCTGCCTATACTTTGTGAGTTCACCTGTCTTTATACTCAAAGTGTCCCTTAATAGTGTCTTCCCTGAAATA
AATACCTAAGGGAGTGTAAACAGTCTCTGGAGGACCATTGAGCCTTTGGAAGTTAAGGTTTCCTCAGCCACCTG
CCGAACAGTTTCTCATGTGGTCTTATTATTTGTCTACTGAGACTTAATACTGAGCAATGTTTGAACAAGATTT
CAAATAATCTGGGTTGTAATACAGTTTATACCAGTGTATGCTCTAGACTTGGAAGATGTAGTATGTTTGTATGTG
GATTACCTATACTTATGTTTCGTTTTGATACATTTTATAGCTTTCATTATAAGGTGATTATGCTTTAGTGAATTC
TTCATAGATAGTATATATAAAGTACATTTTAAATAGAAAGCCAGGGTTTTAAGGAATTCACATGTATAAGGTGG
CTCCATAGCTTTATTTGTAAGTAGGCTGGATAAATGGTGCTTAAATGGTAATGTACTCCACTTCTTCTATTGGA
AGATTAACATTATTTACCAAGAAGGACTTAAGGGAGTAAGGGGCGCAGATTAGCATTGCTCAAGAGTATGTAAAA
AAAAAAAAAAAAAAAAAAAA

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FIGURE 2960

MNSPKSKKAKKKEEPSQNDISPKTKSLRKKKEPIEKKVVSSTKKVTKNEEPSSEEIDAPKPKMKKKEKEMNGET
REKSPKLKNGFPHPEPDCNPSEAASEESNSEIEQEIPVEQKEGAFSNFPISEETIKLLKGRGVTFLLFP IQAKTFH
HVYSGKDLIAQARTGTGKTF SFAIPLIEKLHGELQDRKRGRAPQVLVLAPTRELANQVSKDFSDITKKLSVACFY
GGTPYGGQFERMRNGIDILVGTPGRIKDHIQNGKLDLTKLKHVVLEVDQMLDMGFADQVEEILSVAYKKDSEDN
PQTLLFSATCPHWVFNVAKKYMKSTYEQVDLIGKKTQKTATVEHLAIKCHWTQRAAVIGDVIRVYSGHQGRTII
FCETKKEAQELSQNSAIKQDAQSLHGDIPQKQREITLKGRNGSFGVLVATNVAARGLDIPVDLVIQSSPPKDV
ESYIHRSGRTGRAGRTGVCICFYQHKEEYQLVQVEQKAGIKFKRIGVPSATEIIKASSKDAIRLLDSVPPTAISH
FKQSAEKLIEEKGAVEALAAALAHISGATSVDQSLINSNVGFVTMILQCSIEMPNISYAWKELKEQLGEEIDSK
VKGMVFLKGKLGVCFDVPTASVTEIQEKWHD SRRWQLSVATEQPELEGPREGYGGFRGQREGSRGFRGQRDGNRR
FRGQREGSRGPRGQRSGGGNKSNSRQNKGQKRSFSKAFGQ

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FIGURE 2961

GAATTCCGCTAGACTAAGTTGGTCATGATGCAGAAGCTACTCAAATGCAGTCGGCTTGCTGGCTCTTGCCCTC
ATCCTGGTTCTGGAATCCTCAGTTCAAGGTTATCCTACGCAGAGAGCCAGGTACCAATGGGTGCGCTGCAATCCA
GACAGTAATTCTGCAAACTGCCTTGAAGAAAAAGGACCAATGTTGAACTACTTCCAGGTGAATCCAACAAGATC
CCCCGTCTGAGGACTGACCTTTTTCCAAAGACGAGAATCCAGGACTTGAATCGTATCTTCCCACCTTTCTGAGGAC
TACTCTGGATCAGGCTTCGGCTCCGGCTCCGGCTCTGGATCAGGATCTGGGAGTGGCTTCCTAACGGAAATGGAA
CAGGATTACCAACTAGTAGACGAAAGTGATGCTTTCCATGACAACCTTAGGTCTCTTGACAGGAATCTGCCCTCA
GACAGCCAGGACTTGGGTCAACATGGATTAGAAGAGGATTTTATGTTATATAAGAGGATTTTCCCACCTTGACAC
CAGGCAATGTAGTTAGCATATTTTATGTACCATGGTTATATGATTAATCTTGGGACAAAGAATTTTATAGAAATT
TTTAAACATCTGAAAAAGAAGCTTAAGTTTTATCATCCTTTTTTTTTCTCATGAATTCCTTAAAGGATTATGCTTTA
ATGCTGTTATCTATCTTATTGTTCTTGAAATACCTGCATTTTTTGGTATCATGTTCAACCAACATCATTATGAA
ATTAATTAGATTCCCATGGCCATAAAATGGCTTTAAAGAATATATATATATTTTTTAAAGTAGCTTGAGAAGCAAA
TTGGCAGGTAATATTTTATACCTAAATTAAGACTCTGACTTGGATTGTGAATTATAATGATATGCCCTTTTCTT
ATAAAAACAAAAAAAAAATAATGAAACACAGTGAATTTGTAGAGTGGGGGTATTTGACATATTTTACAGGGTGGA
GTGTACTATATACTATTACCTTTGAATGTGTTTGCAGAGCTAGTGGATGTGTTTGTCTACAAGTATGATTGCTGT
TACATAACACCCCAAATTAACCTCCCAAATTAACACAGTTGTGCTGTCAATACCTCATACTGCTTTACCTTTTT
TTCTTGATATCTGTGTATTTTCAAATGTTACTATATATTAAAGCAGAAATATAACC

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FIGURE 2962

MMQKLLKCSRLVLALALILVLESSVQGYPTQRARYQWVRCNPDSNSANCLEEKGPMFELLPGESNKIPRLRTDLF
PKTRIQDLNRIFPLSEDYSGSGFGSGSGSGSGSGSGFLTEMEQDYQLVDESDAFHDNLRSLDRNLPSDSQDLGQH
GLEEDFML

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FIGURE 2963

GAACGCCGGTGGCGGGGCTGGTAGCCCGGCAGCCGCAGGTGGGGCCACGAGCGCTGGCTGAGGGACCGAGCCGGA
GAGCCCCGGAGCCCCCGTAACCCGCGCGGGGAGCGCCAGGATGCCGCGCGGGGACTCGGAGCAGGTGCGCTACT
GCGCGCGCTTCTCCTACCTCTGGCTCAAGTTTTCACTTATCATCTATTCCACCGTGTTCTGGCTGATTGGGGCCC
TGGTCTGTCTGTGGGCATCTATGCAGAGGTTGAGCGGCAGAAATATAAAACCCTTGAAAGTGCCCTCCTGGCTC
CAGCCATCATCTCATCTCCTGGGCGTCGTCATGTTTCATGGTCTCCTTCATTGGTGTGCTGGCGTCCCTCCGTG
ACAACCTGTACCTTCTCCAAGCATTTCATGTACATCCTTGGGATCTGCCTCATCATGGAGCTCATTGGTGGCGTGG
TGGCCTTGACCTTCCGGAACCAGACCATTGACTTCCTGAACGACAACATTCGAAGAGGAATTGAGAACTACTATG
ATGATCTGGACTTCAAAAACATCATGGACTTTGTTTCAGAAAAAGTTCAAGTGCTGTGGCGGGGAGGACTACCGAG
ATTGGAGCAAGAATCAGTACCACGACTGCAGTGCCCTGGACCCCTGGCCTGTGGGGTGCCCTACACCTGCTGCA
TCAGGAACACGACAGAAGTTGTCAACACCATGTGTGGCTACAAAACATTCGACAAGGAGCGTTTCAGTGTGCAGG
ATGTCTATCTACGTGCGGGGCTGCACCAACGCCGTGATCATCTGGTTCATGGACAACATACACCATCATGGCGGGCA
TCCTCCTGGGCATCCTGCTTCCCCAGTTCTGGGGGTGCTGCTGACGCTGCTGTACATACCCGGGTGGAGGACA
TCATCATGGAGCACTCTGTCACTGATGGGCTCCTGGGGCCCGGTGCCAAGCCAGCGTGGAGGCGGCAGGCACGG
GATGCTGCTTGTGCTACCCCAATTAGGGCCAGCCTGCCATGGCAGCTCCAACAAGGACCGTCTGGGATAGCACC
TCTCAGTCAACATCGTGGGGCTGGACAGGGCTGCGGCCCTCTGCCACACTCAGTACTGACCAAAGCCAGGGCT
GTGTGTGCCTGTGTGTAGGTCCACGGCCTCTGCCTCCCAGGGAGCAGAGCCTGGGCCTCCCTAAGAGGCTTT
CCCCGAGGCAGCTCTGGAATCTGTGCCACCTGGGGCCTGGGGAACAAGGCCCTCCTTTCTCCAGGCCTGGGCTA
CGGGGGAGGGAGAGCCTGAGGCTCTGCTCAGGGCCCATTTTCATCTCTGGCAGTGCCCTGGCGGTGGTATTCAAGG
CAGTTTTGTAGCACCTGTAATTGGGGAGAGGGAGTGTGCCCTCGGGGCAGGAGGGAAGGGCATCTGGGGAAGGG
CAGGAGGGAAGAGCTGTCCATGCAGCCACGCCCATGGCCAGGTTGGCCTCTTCTCAGCCTCCCAGGTGCCTTGAG
CCCTCTTGCAAGGGCGGCTGCTTCCTTGAGCCTAGTTTTTTTTACGTGATTTTTGTAAACATTCATTTTTTTGTACA
GATAACAGGAGTTTCTGACTAATCAAAGCTGGTATTTCCCGCATGTCTTATTCTTGCCCTTCCCCCAACCAGTT
TGTTAATCAAACAATAAAAACATGTTTTTTTTT

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FIGURE 2964

GGGCTCTCTCCTTGTCTAGTCGGCGCCGCGTGC GGGCTGGTGGCTCTGTGGCAGCGGCGGCGGCAGGACTCCGGCA
CT**ATG**AGCGGCTTCAGCACCGAGGAGCGCGCGCCCTTCTCCCTGGAGTACCGAGTCTTCCTCAAAAATGAGA
AAGGACAATATATATCTCCATTTTCATGATATTCCAATTTATGCAGATAAGGATGTGTTTCACATGGTAGTTGAAG
TACCACGCTGGTCTAATGCAAAAATGGAGATTGCTACAAAGGACCCTTTAAACCTATTAAACAAGATGTGAAAA
AAGGAAAACCTTCGCTATGTTGCGAATTTGTTCCCGTATAAAGGATATATCTGGAACCTATGGTGCCATCCCTCAGA
CTTGGAAGACCCAGGGCACAATGATAAACATACTGGCTGTTGTGGTGACAATGACCCAATTGATGTGTGTGAAA
TTGGAAGCAAGGTATGTGCAAGAGGTGAAATAATTGGCGTGAAAGTTCTAGGCATATTGGCTATGATTGACGAAG
GGGAAACCGACTGGAAAGTCATTGCCATTAATGTGGATGATCCTGATGCAGCCAATTATAATGATATCAATGATG
TCAAACGGCTGAAACCTGGCTACTTAGAAGCTACTGTGGACTGGTTTTAGAAGGTATAAGGTTCCCTGATGGAAAAC
CAGAAAATGAGTTTTCGTTAATGCAGAATTTAAAGATAAGGACTTTGCCATTGATATTATTAAGCACTCATG
ACCATTGGAAAGCATTAGTGACTAAGAAAACGAATGGAAAAGGAATCAGTTGCATGAATACAACCTTTGTCTGAGA
GCCCCCTCAAGTGTGATCCTGATGCTGCCAGAGCCATTGTGGATGCTTTACCACCACCCTGTGAATCTGCCGTGCA
CAGTACCAACAGACGTGGATAAGTGGTTCCATCACCAGAAAACT**TAAT**GAGATTTCTCTGGAATACAAGCTGATA
TTGCTACATCGTGTTTCATCTGGATGTATTAGAAGTAAAGTAGTAGCTTTTCAAAGCTTTAAATTTGTAGAACTC
ATCTAACTAAAGTAAATTTCTGCTGTGACTAATCCAATATACTCAGAATGTTATCCATCTAAAGCATTTTTTCATAT
CTCAACTAAGATAACTTTTAGCACATGCTTAAATATCAAAGCAGTTGTCAATTTGGAAGTCACCTTGTGAATAGATG
TGCAAGGGGAGCACATATTGGATGTATATGTTACCATATGTTAGGAAATAAAATTATTTTGCTGAAAAAAAAA
AAAAAA

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FIGURE 2965

MSGFSTEERAAPFSLEYRVFLKNEKGQYISPFHDIPYADKDVFMVVEVPRWSNAKMEIATKDPLNPIKQDVKK
GKLRYVANLFPYKGYIWNYGAIPTWEDPGHNDKHTGCCGDNDPIDVCEIGSKVCARGEIIGVKVLGILAMIDEG
ETDWKVIAINVDDPDAANYNDINDVKRLKPGYLEATVDWFRRYKVPD GKPENEF AFNAEFKDKDFAIDIIKSTHD
HWKALVTKKTNGKGISCMNTTLESFPKCDPDAARAIVDALPPPCESACTVPTDVKWFHHQKN

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FIGURE 2966A

ATGAGCTGCTCAAGGCTCATTACACGTTGGGCCGGCTCTCGGACAACACCCCTGAGCACTACCTGGTGCAAGGCC
GCTACTTTCCTGGTGC GGATGTCACTGAGAAGATGGATGTGCTGGGCACCGTGGGAAGCTGTGGGGCCCCCACT
TCCGGCAGGTGCAGGGTGGGCTCACTGTGTTCCGGCATGGGACAGCCAGCCTCTCAGGGTTCAGGCGGGTCCCTCC
AGAAACTCCAGAAGGACGGACATAGGGAGTGTGTCTCTTCTGTGTGCGGGAGGAACCTGTGCTTTTCTCTGCGTG
CAGATGAGGACTTTGTGTCTTACACACCTCGAGACAAGCAGAACCTTCATGAGAACCTCCAGGGCCTTGAGACCCG
GGGTCCGGGTGGAGAGCCTGGAGCTGGCCATCCGGAAGAGATCCACGACTTTGCCAGCTGAGCGAGAACACAT
ACCATGTGTACCATAACACCGAGGACCTGTGGGGGGAGCCCCATGCTGTGGCCATCCATGGTGAGGACGACTTGC
ATGTGACGGAGGAGGTGTACAAGCGGCCCTCTTCTGTCAGCCACCTACAGGTACCACCGCTGCCCTGCCCG
AGCAAGGGAGTCCCCTGGAGGCCAGTTGGACGCCTTTGTGAGTGTCTCCGGGAGACCCCCAGCCTGCTGCAGC
TCCGTGATGCCCCAGGGCCTCCCCAGCCCTCGTCTTACAGTGCCAGATGGGCGTGGGACAGGACCAACCTGGGCA
TGGTCTCTGGGCACCCCTCATCTGCTTACCGCAGTGGGACCACCTCCCAGCCAGAGGCTGCCCCACGCAGGCCA
AGCCCCCTGCCTATGGAGCAGTTCAGGTGATCCAGAGCTTTCTCCGCATGGTGCCCCAGGGAAGGAGGATGGTGG
AAGAGGTGGACAGAGCCATCACTGCCTGTGCCAGTTGCATGACCTGAAAGAAGTGGTCTTGGA AAAACAGAAGA
AGTTAGAAGGTATCCGACCGGAGAGCCCAGCCCAGGGAAGCGGCAGCCGACACAGCGTCTGGCAGAGGGCGCTGT
GGAGCCTGGAGCGATACTTCTACCTGATCCTGTTTAACTACTACCTTCATGAGCAGTACCCGCTGGCCTTTGCC
TCAGTTTCAGCCGCTGGCTGTGTGCCACCCCTGAGCTGTACCGCCTGCCGTGACGCTGAGCTCAGCAGGCCCTG
TGGCTCCGAGGGACCTCATCGCCAGGGGCTCCCTACGGGAGGACGATCTGGTCTCCCCGGACGCGCTCAGCACTG
TCAGAGAGATGGATGTGGCCAACCTCCGGCGGGTGCCCCGATGCCCATCTACGGCACGGCCCCAGCCCAGCGCCA
AGGCCCTGGGGAGCATCCTGGCCTACCTGACGGACGCCAAGAGGAGGCTGCGGAAGGTGTCTGGGTGAGCCTTC
GGGAGGAGGCCGTGTTGGAGTGTGACGGGCACACCTACAGCCTGCGGTGGCCTGGGCCCCCTGTGGCTCCTGACC
AGCTGGAGACCCTGGAGGCCAGCTGAAGGCCCATCTAAGCGAGCCTCCCCAGGCAAGGAGGGCCCCCTGACCT
ACAGGTTCCAGACCTGCCTTACCATGCAGGAGGTCTTACGCCAGCACCGCAGGGCCTGTCTGGCCTCACCTACC
ACCGCATCCCCATGCCGACTTCTGTGCCCCCCGAGAGGAGGACTTTGACCAGCTGCTGGAGGCCCTGCGGGCCG
CCCTCTCCAAGGACCCAGGCACTGGCTTCGTGTTTACGCTGCCTCAGCGGCCAGGGCCGTACCACAACCTGCGATGG
TGGTGGCTGTCTGGCCTTCTGGCACATCCAAGGCTTCCCCGAGGTGGGTGAGGAGGAGCTCGTGAGTGTGCCCTG
ATGCCAAGTTCACTAAGGGTGAATTTAGGTAGTAATGAAGGTGGTGCAGTGCTACCCGATGGGCACCGTGTGA
AGAAGGAGGTGGACGCAGCGCTGGACACTGTGACGAGACCATGACGCCATGCACTACCACCTGCGGGAGATCA
TCATCTGCACCTACCGCCAGGCGAAGGCAGCGAAAGAGGCGCAAGAAATGCGGAGGCTGCAGCTGCGGAGCCTGC
AGTACTTGGAGCGCTATGTCTGCCTGATTCTCTTCAACGCGTACCTCCACCTGGAGAAGGCCGACTCCTGGCAGA
GGCCCTTACGACCTGGATGCAGGAGGTGGCATCGAAGGCTGGCATCTACGAGATCCTTAACGAGCTGGGCTTCC
CCGAGCTGGAGAGCGGGGAGGACCAGCCCTTCTCCAGGCTGCGCTACCGGTGGCAGGAGCAGAGCTGCAGCCTCG
AGCCCTCTGCCCCGAGGACTTGTGTAGGGGGCCTTACTCCCTGTCCCCCACCCACAGGGCCCCACGCAGGCC
TGGGGTGTCTGAGGTGCTCTTGGCTGGGAGCGGCCCTGAGGGTGTGGCCTTGAATGATTCCCCACTTCCCTG
GAGAGACTGAGCGGAGTTGGGAGCCTTTTGAAGAAGAACTTTTATAGGACAGGGAGACAGCACAGCCATCCCTT
GCAAACCAAGGTGTGTGGCTGACCTCCAGGGAGGAGCACTACTGGAGTGCTCACAAGGTGCACACTGCTGT
GTGTACCTTGCAGACAGGCCGGCGTTACGCTCCAAGGGGCTCACTCCCCAGTTGCCAAACACTGTGGATCTCT
CTGTCTCTTCTCCCCCTCTCTCAGATTGGCCTGGCAGCCCTGGCACAGAGCAGACCCGGCCACTGGTAGCTCCC
CACTTCTTACTCCTGCTGCTCTGCCATTGCCGCTCCCTTGTGTGCTGCCAAGCACTGCCCTCGGGCGTCTGGC
AGCCTGAGGTGGGTGGAGGGGACAGTGTCTGGATAGATCTATTATGTGAAAGGCAGCTTACCCAGTTTCTGG
ACTCTCATGCCCCATCTCCGACCTGGGAGACTTCAGGAATGACAACCTACCCAGCTTGGTGGGCTGGCAGGAT
GGTGGAGGTTTCTCAAGGAGCTGGAGACTTCAGGGAGCCCTCTCATGGGGAGGAAAGAGCTTCCAGGGGGCGAA
CGCAGCACAGAGGAAGAGGCCTGCTCCACTTGTCTGGGAACCTGGGCAGGAGGCACAGAGGAAGCCAAGGCCTGG
AGCTGCAGGTCCCCCGGCATCTCTCTGTGCCGAGCCAGGATGGCCTGGTGCCCCACCTGCTGCAGCAGG
AGCCCCAAGGAGTGCTAGCTGAGGGTGGTTGCTGGGGTGGTCTCATGGACAGTGAGGTGTGCAAGGGTGCAGTG
AGGGTGGTGGGAGGGGATCACCTGGGTTCCAGGCCATCCTTGCTGAGCATCTTTGAGCCTGCCTTCCGGTGGGAG
CAGAAAAGGCCAGACCCTGCTGAGTTAGAGGCTGCTGGGATCCACTGTTTCCACACAGCGGGAAGGCTGCTGGGA
ACAGGTGGCAGAGAAGTGCCATGTTTGCCTTGGAGCTTGCAGCTCTTCCAGCTGGGGACTGGTGTCTGCTGAAAC
CCAGGAGCTGAACAGTGAGGAGGCTGTCCACCTTGCTTGGCTCACTGGGACCAGGAAAGCCTGTCTTTGGTTAGG

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FIGURE 2966B

CTCGTGTA CTTCTGCAGGAAAAAAAAAAGGATGTGTCATTGGTCATGATATTTGAAAAGGGGAGGAGGCCGAA
GTTGTTCCCATTTATCCAGTATTGGAAAATATTTGACCCCTTGGCTGAATTCTTTGCAGAACTACTGTGTGTC
TGTTCACTACCTTTTCAGGTTTATTGTTTTTATTTTGCATGAATTAAGACGTTTTAATTTCTTTGCAGACAAGG
TCTAGATGCGGAGTCAGAGATGGGACTGAATGGGGAGGGATCCTTTGTGTTCTCATGGTTGGCTCTGACTTTCAG
CTGTGTTGGGACCACTGGCTGATCACATCACCTCTCTGCCTCAGTTTCCCATCTGTAAATGGGAGAATAATAC
TTGCCTACCTACCTCACAGGGGTGTTGTGAGGATTCAATTTGTGATTTTTTTTTTTTTTTGTACAGAGCTTTTAAGC
ATTAAAAACAGCTAAATGTG

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FIGURE 2967

MGTTASTAQQTVSAGTPFEGLQGSGTMDSRHSVSIHSFQSTSLHNSKAKSIIPNKVAPVVITYNCKEEFQIHDEL
LKAHYTLGR LSDNTPEHYLVQG RYFLVRDVTEKMDVLGTVGSCGAPNFRQVQGGLTVFGMGQPSLSGFRRLVQLK
QKDG HREC VIFCVREEPVLF LRADEDFVS YTPRDKQNLHENLQGLGPGVRVESLELAIRKEIHDF AQLS ENTYHV
YHNTE DLWGEPHAVA IHGEDDLHVTEEVYKRPLFLQPT YRYHRLPLPEQGS PLEAQLDAFVSVLRETPSLLQLRD
AHGPPP ALVFSQMGVGR TNLGMVLGTLILLHRS GTTSQPEAAPTQAKPLPMEQFQVIQSFLRMVPQGRRMVEEV
DRAITACAE LHDLKEVVLENQKKLEGIRPESPAQGS GSRHSVWQRALWSLERYFYLI LFNYYLHEQYPLAFALSF
SRWLCAHP ELYRLPVT LSSAGPVAPRDLIARGSLREDDLVSPDALSTVREMDVANFRVRPMP IYGTAPSAKAL
GSILAYLTDAKRRLRKVVVWVSLREEAVLECDGHTYSLRWPGPPVAPDQLETLEAQLKAHLSEPPPGKEGPLTYRF
QTCLTMQEVFSQHRRACPG LTYHRIPMPDFCAPREEDFDQLLEALRAALSKDPGTGFVFSCLSGQGRTTTAMVVA
VLAFWHIQGFPEVGEEELVSVPDAKFTKGEFQVVMKV VQLLPDGH RVKKEVDAA LDTVSETMTMPMHYHLREIIC
TYRQAKAAKEAQEMRRLQLRSLQYLERYVCLILFNAYLHLEKADSWQRPFSTWMQEVASKAGIYEILNELGFPEL
ESGEDQPF SRLRYRWQEQSCSLEPSAPEDLL

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FIGURE 2968

CCGCCGTCTAGCGCCCCGACCTCGCCACCATGCAGAGCCCTGCTGGCGCGCCTGCTTCTCTGCGTCCTGGTCTGTGA
GCGACTCCAAAGGCAGCAATGAACTTCATCAAGTTCCATCGAACTGTGACTGTCTAAATGGAGGAACATGTGTGT
CCAACAAGTACTTCTCCAACATTCACTGGTGCAACTGCCCAAAGAAATTCGGAGGGCAGCACTGTGAAATAGATA
AGTCAAAAACCTGCTATGAGGGGAATGGTCACTTTTACCGAGGAAAGGCCAGCACTGACACCATGGGCCGGCCCT
GCCTGCCCTGGAACCTCTGCCACTGTCCTTCAGCAAACGTACCATGCCACAGATCTGATGCTCTTCAGCTGGGCC
TGGGGAACATAATTACTGCAGGAACCCAGACAACCGGAGGCGACCCTGGTGCTATGTGCAGGTGGGCCTAAAGC
TGCTTGTCCTAAGAGTGCATGGTGCATGACTGCGCAGATGGAAAAAGCCCTCCTCTCCTCCAGAAGAATTAAAAAT
TTCAGTGTGGCCAAAAGACTCTGAGGCCCCGCTTTAAGATTATTGGGGGAGAATTCACCACCATCGAGAACCAGC
CCTGGTTTGCGGCCATCTACAGGAGGCACCGGGGGGCTCTGTACCTACGTGTGTGGAGGCAGCCTCATCAGCC
CTTGCTGGGTGATCAGCGCCACACACTGCTTCATTGATTACCCAAAGAAGGAGGACTACATCGTCTACCTGGGTCT
GCTCAAGGCTTAACCTCCAACACGCAAGGGGAGATGAAGTTTGAGGTGGAAAACCTCATCCTACACAAGGACTACA
GCGCTGACACGCTTGCTCACCACAACGACATTGCCTTGCTGAAGATCCGTTCCAAGGAGGGCAGGTGTGCGCAGC
CATCCCGGACTATACAGACCATCTGCCTGCCCTCGATGTATAACGATCCCCAGTTTGGCACAAGCTGTGAGATCA
CTGGCTTTGGAAAAGAGAATTCTACCGACTATCTCTATCCGGAGCAGCTGAAAATGACTGTTGTGAAGCTGATTT
CCCACCGGGAGTGTGAGCAGCCCCACTACTACGGCTCTGAAGTCACCACCAAATGCTGTGTGCTGCTGACCCAC
AGTGGAAAACAGATTCCCTGCCAGGGAGACTCAGGGGGACCCCTCGTCTGTTCCCTCCAAGGCCGCATGACTTTGA
CTGGAATTGTGAGCTGGGGCCGTGGATGTGCCCTGAAGGACAAGCCAGGCGTCTACACGAGAGTCTCACACTTCT
TACCCTGGATCCGCAGTCACACCAAGGAAGAGAATGGCCTGGCCCTCTTCAGGGTCCCCAGGGAGGAAACGGGCAC
CACCCGCTTTCTTGCTGGTTGTCATTTTTGTCAGTAGAGTCATCTCCATCAGCTGTAAGAAGAGACTGGGAAGATA
GGCTCTGCACAGATGGATTGCTGTGCCACCCACCAGGGCGAACGACAATAGCTTTACCCTCAGGCATAGGCCT
GGGTGCTGGCTGCCCAGACCCCTCTGGCCAGGATGGAGGGGTGGTCTGACTCAACATGTTACTGACCAGCAACT
TGCTTTTTCTGGACTGAAGCCTGCAGGAGTTAAAAAGGGCAGGGCATCTCCTGTGCATGGGTGAAGGGAGAGCC
AGCTCCCCCGACGGTGGGCATTTGTGAGGCCCATGGTTGAGAAATGAATAATTTCCCAATTAGGAAGTGTAAACAG
CTGAGGTCTCTTGAGGGAGCTTAGCCAATGTGGGAGCAGCGTTTGGGGAGCAGAGACACTAACGACTTCAGGGC
AGGGCTCTGATATTCCATGAATGTATCAGGAAATATATATGTGTGTGTATGTTTGCACACTTGTGTGTGGGCTGT
GAGTGTAAGTGTGAGTAAGAGCTGGTGTCTGATTGTTAAGTCTAAATATTTCCCTTAAACTGTGTGGACTGTGATG
CCACACAGAGTGGTCTTTCTGGAGAGGTTATAGGTCACTCCTGGGGCCTCTTGGGTCCCCACGTGACAGTGCCT
GGGAATGTATTATTCTGCAGCATGACCTGTGACCAGCACTGTCTCAGTTTCACTTTCACATAGATGTCCCTTTCT
TGGCCAGTTATCCCTTCCTTTTAGCCTAGTTCAATCAATCCTCACTGGGTGGGGTGAAGACCACTCCTGTACACT
GAATATTTATATTTCACTATTTTTATTTATATTTTGTAAATTTAAATAAAAGTGATCAATAAAATGTGATTTTT
CTGA

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FIGURE 2969

MRALLARLLLCVLVVSDSKGSNELHQVPSNCDCLNGGTCVSNKYFSNIHWCNCPKKFGGQHCEIDKSKTCYEGNG
HFYRGKASTDTMGRPCLPWNSATVLQQTYHAHRSDALQLGLGKHNYCRNPDNRRRPWCYVQVGLKLLVQECMVHD
CADGKKPSSPPEELKFQCGQKTLRPRFKIIGGEFTTIENQPWFAAIYRRHRGGSVTYVCGGSLISPCWVISATHC
FIDYPKKEDIIVYLGRSRLNSNTQGEMKFEVENLILHKDYSADTLAHHNDIALLKIRSKEGRCAQPSRTIQTICL
PSMYNDPQFGTSCEITGFGKENSTDYLYPEQLKMTVVKLISHRECQQPHYYGSEVTTKMLCAADPQWKTDSCQGD
SGGPLVCSLQGRMTLTGIVSWGRCALKDKPGVYTRVSHFLPWIRSHSTKEENGLAL

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FIGURE 2970

GCGGATCATCCGCTTCCGGAGTCGAGGTTTTTCGGGCTTGTACCGCTTGGCGGTGCGGCCTGGTGTCCGCTTGCAG
GTTCTTTCTGTGTTTGTCTCTGCCCTGCCAAGGCCGTAGAGCTGGTGCGTGCGGGTAGCGGGGCTCTCCGAGGA
GCCGCACGCCGGCGGCACCATGGTCCACCTCACTACTCTCCTCTGCAAGGCCTACCGTGGGGGCCACTTAACCAT
CCGCCTTGCCCTGGGTGGCTGCACCAATCGGCCGTTCTACCGCATTGTGGCTGCTCACAACAAGTGTCCAGGGA
TGGCCGTTTCGTAGAGCAGCTGGGCTCCTATGATCCATTGCCCAACAGTCATGGAGAAAACTCGTTGCCCTCAA
CCTAGACAGGATCCGTCATTGGATTGGCTGCGGGGCCACCTCTCTAAGCCTATGGAAAAGCTTCTGGGTCTTGC
TGGCTTTTTCCCTCTGCATCCTATGATGATCACAATGCTGAGAGACTGCGAAGGAAACGGGCACGTGAAGTCCT
GTTAGCTTCTCAGAAAAACAGATGCAGAAGCTACAGATACAGAGGCTACAGAAACATAAATGAGCTGACTTTAGTG
AGCATAGCAGTGGGAACAAGGTCAAGGTCCTTTTGAAACACTGCAGCGATCTTAATTTTGTTAGATTGGAGTTC
AATAAATGGAGTATCCTG

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FIGURE 2971

GCAGCAGGCCAAGGGGGAGGTGCGAGCGTGGACCTGGGACGGGTCTGGGCGGCTCTCGGTGGTTGGCACGGGTTC
GCACACCCATTCAAGCGGCAGGACGCACTTGTCTTAGCAGTTCTCGCTGACCGCGCTAGCTGCGGCTTCTACGCT
CCGGCACTCTGAGTTCATCAGCAAACGCCCTGGCGTCTGTCTCACCATGCCCTAGCCTTTGGGACCGCTTCTCGT
CGTCGTCCACCTCCTCTTCGCCCTCGTCCTTGCCCCGAACCCCACCCAGATCGGCCGCCGCGCTCAGCCTGGG
GGTCGGCGACCCGGGAGGAGGGGTTTGACCGCTCCACGAGCCTGGAGAGCTCGGACTGCGAGTCCCTGGACAGCA
GCAACAGTGGCTTCGGGCCGGAGGAAGACACGGCTTACCTGGATGGGGTGTCTGTTGCCCGACTTCGAGCTGCTCA
GTGACCCTGAGGATGAACACTTGTGTGCCAACCTGATGCAGCTGCTGCAGGAGAGCCTGGCCCAGGCGCGGCTGG
GCTCTCGACGCCCTGCGCGCCTGCTGATGCCTAGCCAGTTGGTAAGCCAGGTGGGCAAGAAGCTACTGCGCCTGG
CCTACAGCGAGCCGTGCGGCCTGCGGGGGGCGCTGCTGGACGCTGCGTGGAGCAGGGCAAGAGCTGCCACAGCG
TGGGCCAGCTGGCACTCGACCCAGCCTGGTGCCACCTTCCAGCTGACCCCTCGTGCTGCGCCTGGACTCACGAC
TCTGGCCCAAGATCCAGGGGCTGTTTAGCTCCGCCAACTCTCCCTTCCCTCCCTGGCTTCAGCCAGTCCCTGACGC
TGAGCACTGGCTTCCGAGTCATCAAGAAGAAGCTGTACAGCTCGGAACAGCTGCTCATTGAGGAGTGTGAACTT
CAACCTGAGGGGGCCGACAGTGCCCTCCAAGACAGAGACGACTGAACTTTGGGGTGGAGACTAGAGGCAGGAGC
TGAGGGACTGATTCCAGTGGTTGGAAAAGTGAAGGCAGCCACCTAAGGTGGAGGTGGGGGAATAGTGTTCACAGG
AAGCTCATTGAGTTGTGTGCGGGTGGCTGTGCATTGGGGACACATACCCCTCAGTACTGTAGCATGGAACAAAGG
CTTAGGGGCCAACAAGGCTTCCAGCTGGATGTGTGTGTAGCATGTACCTTATTATTTTGTACTGACAGTTAAC
AGTGGTGTGACATCCAGAGAGCAGCTGGGCTGCTCCCGCCCCAGCCTGGCCCAGGGTGAAGGAAGAGGCACGTGC
TCCTCAGAGCAGCCGGAGGGAGGGGGAGGTGCGAGGTCTGGAGGTGGTTTGTGTATCTTACTGGTCTGAAGGG
ACCAAGTGTGTTTGTGTTGTTTGTATCTTGTGTTTCTGATCGGAGCATCACTACTGACCTGTTGTAGGCAGC
TATCTTACAGACGCATGAATGTAAGAGTAGGAAGGGTGGGTGTGAGGATCACTTGGGATCTTTGACACTTGAA
AAATTACACCTGGCAGCTGCGTTTAAGCCTTCCCCATCGTGTACTGCAGAGTTGAGCTGGCAGGGGAGGGGCTG
AGAGGTGGGGGCTGGAACCCCTCCCCGGGAGGAGTGCCATCTGGGTCTTCCATCTAGAACTGTTTACATGAAGA
TAAGATACTCACTGTTTATGAATACACTTGATGTTCAAGTATTAAGACCTATGCAATATTTTTTACTTTTCTAAT
AAACATGTTTGTAAACAAAAAAAAAAAAAAAAAAAA

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FIGURE 2972

MPSLWDRFSSSSTSSSPSSLPRTPDRPPRSAWGSATREEGFDRSTSLESSDCESLDSSNSGFGPEEDTAYLDG
VSLPDFELLSDPEDEHLCANLMQLLQESLAQARLGSRPARLLMPSQLVSQVGKELLRLAYSEPCGLRGALLDVC
VEQGKSCHSVGQLALDPSLVPTFQLTLVLRDLSRLWPKIQGLFSSANSFPFLPGFSQSLTLSTGFRVIKKKLYSSE
QLLIEEC

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FIGURE 2973

CGCATTGCAGACTGCGGAGTCAGACGGCGCTATGTACGCCCTCTTCTCTCTGGCCAGCCTCTCTGGGCGCGGCTCT
AGCCGGCCCCGGTCCTTGGACTGAAAGAATGCACCAGGGGCTCGGCAGTGTGGTGCCAGAATGTGAAGACGGCGTC
CGACTGCGGGGAGTGAAGCACTGCCTGCAGACCGTTTGAACAAGCCAACAGTGAAATCCCTTCCCTGCGACAT
ATGCAAAGACGTTGTACCCGAGCTGGTGATATGCTGAAGGACAATGCCACTGAGGAGGAGATCCTTGTITACTT
GGAGAAGACCTGTGACTGGCTTCCGAAACCGAACATGTCTGCTTCATGCAAGGAGATAGTGGACTCCTACCTCCC
TGTCATCCTGGACATCATTAAAGGAGAAATGAGCCGTCCTGGGGAGGTGTGCTCTGCTCTCAACCTCTGCGAGTC
TCTCCAGAAGCACCTAGCAGAGCTGAATCACCAGAAGCAGCTGGAGTCCAATAAGATCCCAGAGCTGGACATGAC
TGAGGTGGTGGCCCCCTTCATGGCCAACATCCCTCTCTCTCTACCTCAGGACGGCCCCCGCAGCAAGCCCCA
GCCAAAGGATAATGGGGACGTTTGGCAGGACTGCATTAGATGGTGAAGTACATCCAGACTGCTGTACGGACCAA
CTCCACCTTTGTCCAGGCCTTGGTGAACATGTCAAGGAGGAGTGTGACCGCTGGGCCCTGGCATGGCCGACAT
ATGCAAGAACTATATCAGCCAGTATTCTGAAATTGCTATCCAGATGATGATGCACATGCAACCCAAGGAGATCTG
TGCGCTGGTTGGGTTCTGTGATGAGGTGAAAGAGATGCCCATGCAGACTCTGGTCCCCGCCAAAGTGGCCTCCAA
GAATGTCATCCCTGCCCTGGAAGTGGTGGAGCCATTAAAGAAGCAGAGGTCCCAGCAAAGTCTGATGTTTACTG
TGAGGTGTGTGAATTCCTGGTGAAGGAGGTGACCAAGCTGATTGACAACAACAAGACTGAGAAAAGAAATACTCGA
CGCTTTTGACAAAATGTGCTCGAAGCTGCCGAAGTCCCTGTGCGAAGAGTGCCAGGAGGTGGTGGACACGTACGG
CAGCTCCATCCTGTCCATCCTGCTGGAGGAGGTGAGCCCTGAGCTGGTGTGCAGCATGCTGCACCTCTGCTCTGG
CACGCGGCTGCCTGCACTGACCGTTCACGTGACTCAGCCAAGGACGGTGGCTTCTGCGAAGTGTGCAAGAAGCT
GGTGGGTTATTTGGATCGCAACCTGGAGAAAAACAGCACCAAGCAGGAGATCCTGGCTGCTCTTGAGAAAGGCTG
CAGCTTCTGCCAGACCCCTTACCAGAAGCAGTGTGATCAGTTTGTGGCAGAGTACGAGCCCGTGTGATCGAGAT
CCTGGTGGAGGTGATGGATCCTTCTCTGCTGTGCTTGAAATTGGAGCCTGCCCTCGGGCCATAAGCCCTTGT
GGGAAGTGAAGTGATATAGGGGCCCAAGCTACTGGTGCCAGAACACAGAGACAGCAGCCAGTGCAATGCTGT
CGAGCATTGCAACGCCATGTGTGGAAGTAGGAGGAGGAATATTCCATCTTGGCAGAAACCACAGCATTGGTTTT
TTTCTACTTGTGTGCTGCTGGGGGAATGAACGCACAGATCTGTTTGACTTTGTTATAAAAAATAGGGCTCCCCACCT
CCCCATTTCTGTGCTCTTTATTGTAGCATTGCTGTCTGCAAGGGAGCCCTAGCCCTGGCAGACATAGCTGCT
TCAGTGCCCTTTTCTCTCTGCTAGATGGATGTTGATGCACTGGAGGTCTTTTAGCCTGCCCTTGATGGCGCCT
GCTGGAGGAGGAGAGAGCTCTGCTGGCATGAGCCACAGTTTCTTGACTGGAGGCCATCAACCCTCTTGGTTGAGG
CCTTGTCTGAGCCCTGACATGTGCTTGGGCACTGGTGGGCCTGGGCTTCTGAGGTGGCCTCCTGCCCTGATCAG
GGACCTCCCCGCTTCTCTGGCCCTCTCAGTTGAACAAAGCAGCAAAACAAAGGCAGTTTTATATGAAAGATTAG
AAGCCTGGAATAATCAGGCTTTTTAAATGATGTAATCCCAGTGAATAGCATAGGGATTTTGAAGCAGCTGCT
GGTGGCTTGGGACATCAGTGGGGCCAAGGGTTCTCTGTCCCTGGTTCAACTGTGATTTGGCTTTCCCGTGTCTTT
CCTGGTGTGCTTGTGTTGGGGTTCTGTGGGTTTGGGTGGGAAGAGGGCCATCTGCCTGAATGTAACCTGCTAGC
TCTCCGAAGGCCCTGCGGGCCTGGCTTGTGTGAGCGTGTGGACAGTGGTGGCCGCGCTGTGCCTGCTCGTGTTC
CTACATGTCCCTGGCTGTTGAGGCGCTGCTTCAGCCTGCACCCCTCCCTTGTCTCATAGATGCTCCTTTTGACCT
TTTCAAATAAATATGGATGGCGAGCTCCTAGGCCTCTGGCTTCTGGTAGAGGGCGGCATGCCGAAGGGTCTGCT
GGGTGTGGATTGGATGCTGGGGTGTGGGGTTGGAAGCTGTCTGTGGCCACTTGGGCACCCACGCTTCTGTCCA
CTTCTGGTTGCCAGGAGACAGCAAGCAAGCCAGCAGGACATGAAGTTGCTATTAAATGGACTTCGTGATTTTTG
TTTTGCACTAAAGTTTCTGTGATTTAACAATAAAATCTGTAGCC

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FIGURE 2974

MYALFLLASLLGAALAGPVLGLKECTRGSAVWCQNVKTASDCGAVKHCLQTVWNKPTVKSILPCDICKDVVTAAGD
MLKDNATEEEILVYLEKTCDWLPKPNMSASCKEIVDSYLPVILDI IKGEMSRPGEVCSALNLCESLQKHLAELNH
QKQLESNKIPELDMTEVVAPFMANIPLLLYPQDGPRSKPQPKDNGDVCQDCIQMVTDIQTAVRTNSTFVQALVEH
VKEECDRLGPGMADICKNYISQYSEIAIQMMMHMQPKEICALVGFCDEVKEMPMQTLVPAKVASKNVIPALELVE
PIKKHEVPAKSDVYCEVCEFLVKEVTKLIDNNKTEKEILDADFDMCSKLPKSLSEECQEVVDITYGSSILSILLEE
VSPELVCSMLHLCSGTRLPALTVHVTQPKDGGFCEVCKKLVGYLDRNLEKNSTKQEILAALEKGCFLPDYPYQKQ
CDQFVAEYEPVLEILVEVMDPSFVCLKIGACPSAHKPLLGTCKIWGSPSYWCQNTETAAQCNAVEHCKRHVWN

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FIGURE 2975

GTGTCTTTCCTGGTGATGCCTTGTTTGGGGTTCTGTGGGTTTGGGTGGGAAGAGGGCCATCTGCCTGAATGTAAC
CTGCTAGCTCTCCGAAGGCCCTGCGGGCCTGGCTTGTTGTGAGCGTGTGGACAGTGGTGGCCGCGCTGTGCCTGCT
CGTGTTGCCTACATGTCCCTGGCTGTTGAGGCGCTGCTTCAGCGCACCCACGCTTCGTCCACTTCTGGTTGCCA
GGAGACAGCAAGCAAAGCCAGCAGGACATGAAGTTGCTATTAAATGGACTTCGTGATTTTGTGTTTGCCTAAAG
TTTCTGTGATTTAACAATAAAATTCTGTTAGCCAG

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FIGURE 2976

AGACTAAAGACATTAAAGAGATAGCCAAAAAGACACAAGCCCTGCCAAAGATGAACTCAAAGAGGCAGCGAATCG
TGATCTTCACCCAAGGGAGAGATGACACTATAATGGCTACAGAAAGTGAAGTCACTGCTTTTGCTGTCTTGGATC
AAGACCAGAAAGAAATTATTGATACCAATGGAGCTGGAGATGCATTTGTTGGAGGTTTTCTGTCTCAACTGGTCT
CTGACAAGCCTCTGACTGAATGTATCCGTGCTGGCCACTATGCAGCAAGCATCATAATTAGACGGACTGGCTGCA
CCTTTCCTGAGAAGCCAGACTTCCACTGATGGAAGAGCTGAAAACACAAGCCCAGGAGTGCAGACACTGCCCTAA
TTGCTTCCTGAGAATTCCTATTAATAAAGAAGAAATTATCTGCCATTTTTCTACTATAATAATGCTGAAT
CTTAATTTAGAGGGTACAAGGGTATGGTAATGCTTGTAGAATCTTATTATCTCAACAATCTAAAAAATGATGTT
TATTTCCATAGTTTGATAGTGCCACTTAAATGCCAATTAAACAAGAATATAACATTTCAATAGAAATTTTTATTT
CATTTTCAATTACTTTGTAAATTCGTGTGTATTTAGTACACTGATTTGTTTTTTTACATTTCTGCTTTGAATGCA
GATGCAATTTAATATAATAGATTTTTTAATGAATTAATCTTAACATAGTAATCTTTAGCTTTTTATACAAATATA
TTTAATTTAGGAGTATATGTGTGTCTATACACACACATACATAAATATACCACATATACACCTGATAGTCAAATA
AGGTACAGAAATTTTATCTTGTCAATTATGCCAAATAATCTCTTAATGTGCACTCAAACATGTAATAAACTTTG
GATAATT

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FIGURE 2977

AGCCTGAACCTCTAGGACTTTTAATTGATACCAAGTGGTCTCCGCTCTGAAACAGTCCACCAGAATGAGGGTACCA
AACTGACCTCAGAGGTTTCCAGGTTTGATGAACTTGTGAAAAAATCAAAGTCGAATATCATGCTGGTGGCTCTA
CCCAGAATTCAATTAAAGTGGCTCAGAATCTGGAGAGCCTGTCTTGTTGCCCCGACAGATACCCCTCTTCCAGC
AGATCTCTGCACAGAATTATTTTCAGACCACAGCAAGAAGGGTCAGAGCTGAGAATGGACCACCTGAGGATCTGC
TGTGGGATGGAGCAGGAACCTGCTTAGGTGGTACCAATCTTGACTTCCAGATGGAACAGTACATCTCTATAAGGA
AAAGTGATGGCATCCACATCGTAAATCTGAAGAGGACCTGGGAGAAGCTTCTGCTGGCAGCTTGTGCCATTGTTG
CCATTGAAAACCTGCTGATGTCAGTGTTATATCCTCCAGGAATATTGGCCAAAGGGCTGTGCTGAAGTTTGCTG
CTGCCACTGGAGCCACTCCAATTGTTGGCCACTTCACTCCTGGAACCTTCACTAACCACATCCAGGCAGCCTTCC
AAGAGCCACGGCTTCTTGTGGTTACTGACCCAGGGCTGACCACCAGCCTCTCACAGAGGCATCTTACGTTAACC
TATCTACCGTTGCTTTGTGTAACACAGATTCTCCTCTGCACTTTGTGGACATTGCCATTCTATGCAACAATAAGG
GAGCTCACTCAATGGGTTTGATGTGGTGGATGCCAGCCCGGAAGGTTTGC GCGCGTGTGGCACCATTTCCTCATG
AACACCCATGGGAATTCATGCCTGATCTCTACAGAGATCCTAAAGAGACTGAAAAAGCAGAGCAGCCTGCTGCTG
AAAAGGCTGTGACCAAGGAGGAATTTAGGGTGAATGGACTGCTCCAGCTCCTGAGTTAACTGCTACTCAGCCTG
AGGTTGCAGACTGGTCTGAAGGTGTGCAGGTGCCCTCTGCGCCTATTATCAGTTCCCTACTGAAGACTGGAGTG
CTGAGCCTGCCACGGAAGGCTGGTCCACAGCTCCCAATGCTCAGGCCATTGAATGGTGGATGATTCAACAGCCAC
ACAAAGCAGCAACATTTTTTGGATGCATTGGGATAGATAAATTTGGGGAGATCCTGAAGAGAAAAGCTGCTGAAG
CCCATGTGGATGCTCATTACTACGAGCAGAATGAGCAGCCAACAGGAACCTTGTGCTGCATGCATCACTGGTGACA
ACAGGTCCCTCATAGCTAATCTTGCTGCTGCCAATTGTTATAAAAAGGAAAAACATCTTGATCTGGAGAAAACT
GGATGTTGGTAGAAAAAGCAAGAGTTTGTATATAGCAGGTGTGATAAAGCATATTACTAGAAAAAGCATCAATCG
GTCTTTCAGGTACAATACCAGAGGAACCATCACAGTTTATTTACCTTTCAGAAGCTTTAAAAATAAAGTTACATG
ATGCCTCTGCTCTCCAGATTTCTAATCAAACCTGGAACAAAAGAGCCAAGCACATTCTATCTGA

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FIGURE 2978

CTTTTCCTCCTTGGCTGTCTGAAGATAGATCGCCATCATGAACGACACCGTAACTATCCGCACTAGAAAGTTCAT
GACCAACCGACTACTTCAGAGGAAACAAATGGTCATTGATGTCCTTCACCCCGGGAAGGCGACAGTGCCTAAGAC
AGAAATTCGGGAAAACTAGCCAAATGTACAAGACCACACCGGATGTCATCTTTGTATTTGGATTTCAGAACTCA
TTTTGGTGGTGGCAAGACAAC TGGCTTTGGCATGATTTATGATTCCCTGGATTATGCAAAGAAAAATGAACCCAA
ACATAGACTTGCAAGACATGGCCTGTATGAGAAGAAAAAGACCTCAAGAAAGCAACGAAAGGAACGCAAGAACAG
AATGAAGAAAGTCAGGGGGACTGCAAAGGCCAATGTTGGTGCTGGCAAAAAGTGAGCTGGAGATTGGATCACAGC
CGAAGGAGTAAAGGTGCTGCAATGATGTTAGCTGTGGCCACTGTGGATTTTTCGCAAGAACATTAATAAACTAAA
AACTTCATGTGT

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FIGURE 2979

MNDTVTIRTRKFMTNRLLRKQMVIDVLHPGKATVPKTEIREKLAKMYKTPDVIFVFGFRTHFGGGKTTGF^{MI}
YDSL^{DI}YAKKNEPKHRLARHGLYEKKKTSRKQRKERKNRMKKVRGTAKANVGAGKK

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FIGURE 2980

CTTTTCCTCCTTGGCTGTCTGAAGATAGATCGCCATCATGAACGACACCGTAACTATCCGCACTAGAAAAGTTCAT
GACCAACCGACTACTTCAGAGGAAACAAATGGTCATTGATGTCCTTCACCCCGGGAAGGCGACAGTGCCTAAGAC
AGAAATTCGGGAAAAACTAGCCAAAATGTACAAGACCACACCGGATGTCATCTTTGTATTTGGATTTCAGAACTCA
TTTTGGTGGTGGCAAGACAAC TGGCTTTGGCATGATTTATGATTCCCTGGATTATGCAAAGAAAAATGAACCCAA
ACATAGACTTGCAAGACATGGCCTGTATGAGAAGAAAAAGACCTCAAGAAAGCAACGAAAGGAACGCAAGAACAG
AATGAAGAAAGTCAGGGGGACTGCAAAGGCCAATGTTGGTGCTGGCAAAAAGCCGAAGGAGTAAAGGTGCTGCAA
TGATGTTAGCTGTGGCCACTGTGGATTTTTCGCAAGAACATTAATAAACTAAAAACTTCATGTGT

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FIGURE 2981

MNDTVTIRTRKFMTNRLQLQRQMVIDVLHPGKATVPKTEIREKLAKMYKTPDVIFVFGFRTHFGGKTTGFGMI
YDSL DYAKKNEPKHRLARHGLYEKKKTSRKQRKERKNRMKKVRGTAKANVGAGKKPKE

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FIGURE 2982

GCTGCAGCTGCAGCAGCTGGAGGGCGAAGTGAAGGAGACACCGTTCCGCCCGCGGCCTCGCCATGGCGACCCACG
GACAGACTTGCGCGCGTCCAATGTGTATTCCCTCCATCATATGCTGACCTTGGCAAAGTTGCCAGAGATAATTTCA
ACAAAGGATTTGGTTTTGGGTTGGTGAAACTGGATGTGAAAACAAAGTCTTGCACTGGCGTGGAATTTCAACGT
CCGGTTCATCTAATACAGACACTGGTAAAGTTACTGGGACCTTGGAGACCAAATACAAGTGGTGTGAGTATGGTC
TGACTTTACAGAAAAGTGAACACTGATAACACTCTGGGAACAGAAATCGCAATTGAAGACCAGATTTGTCAAG
GTTTGAAACTGACATTTGATACTACCTTCTCACCAAACACAGGAAAGAAAAGTGGTAAAATCAAGTCTTCTTACA
AGAGGGAGTGTATAAACCTTGGTTGTGATGTTGACTTTGATTTTGCTGGACCTGCAATCCATGGTTCAGCTGTCT
TTGGTTATGAGGGCTGGCTTGCTGGCTACCAGATGACCTTTGACAGTGCCAAATCAAAGCTGACAAGGAATAACT
TTGCAGTGGGCTACAGGACTGGGGACTTCCAGCTACACACTAATGTCAATGATGGGACAGAAATTTGGAGGATCAA
TTTATCAGAAAGTTTGTGAAGATCTTGACACTTCAGTAAACCTTGCTTGGACATCAGGTACCAACTGCACCTCGTT
TTGGCATTGCAGCTAAATATCAGTTGGATCCCACTGCTTCCATTTCTGCAAAAGTCAACAACCTCTAGCTTAATTG
GAGTAGGCTATACTCAGACTCTGAGGCCTGGTGTGAAGCTTACACTCTCTGCTCTGGTAGATGGGAAGAGCATT
ATGCTGGAGGCCACAAGGTTGGGCTCGCCCTGGAGTTGGAGGCTTAATCCAGCTGAAAGAAACCTTTGGGAATGG
ATATCAGAAGATTTGGCCTTAATATATTTCCATTGTGACCAGCAGCAGGCTTTTTTCCCCCAAGAAGATGATCAA
AACAAAGGATGATCTCAACAAGAGCTGTATTTTAAGTATTTAGACAGTTCTTTGTTAGCTGGTTTTCTAGTTGGTT
ATCTAGTTACCAATGCTGCAGTCCTGCAGTCACCTATACATTATTTAAATGTATTTAACTGTTAAATGCGCTACC
CACCAATAATGAAATAGACCTTTATGAAAACGTGCAATTGTGTGCATGTTTGTGTTTTATGTTTCTTTAGAAAAC
ATTGACTGTTACCATTGAATGAGATGGATCAGTGGATATTAAGATGAGGTTACAAATTTTGTTAAGTTCAGCCAT
TATTACTTTTGGTATCCCAGAACATGACAAATTATGAATAAAACAAGTATACAT

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FIGURE 2983

MATHGQTCARPMCIPPSYADLGKVARDIFNKGFGFGLVKLDVKTCSGVEFSTSGSSNTDTGKVTGTLETKYKW
CEYGLTFTEKWNTDNTLGTEIAIEDQICQGLKLTFDTTFSPNTGKKSGKIKSSYKRECINLGCDVDFDFAGPAIH
GSAVFGYEGWLAGYQMTFDSA SKLTRNNFAVG YRTGDFQLHTNVNDGTEFGGSIYQKVCEDLDTSVNLAWTSGT
NCTRFGIAAKYQLDPTASISAKVNNSSLIGVGYTQTLRPGVKLTLSALVDGKSINAGGHKVGLALELEA

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FIGURE 2984A

AGCCTTGTTGTCCTCCTGGTGCAGAGCTCGGCCGCTGCTGCTGCTCCGACATCAGAAGAGCCGCCAGAGCGA
TCCCCCTGGGAACTCCCCATGCAGCCCCCTCTCAGCTCCATGAGCTCCATGAAACCCACTCTGTGCGACAGTGA
TGGGTGCTTCCCCTATGACTCTGTCCCTTGGCAGCAGAACACCAACCAGCCTCCCGGCTCCCTTTCCGTGGTCAC
CACGGTTTGGGGAGTAACCAACACATCCCAGAGCCAGGTCCCTTGGGAACCTATGGCCAATGCCAACACCCCAT
GAATCCAGGCGGCAACCCCATGGCGTCGGGCATGACCACCAGCAACCCAGGCCTCAACTCCCCACAGTTTGCGGG
GCAGCAGCAGCAGTTCTCAGCCAAGGCTGGCCCCGCTCAGCCCTACATCCAGCAGAGCATGTATGGCCGGCCCAA
CTACCCCGGCAGCGGGGGCTTTGGGGCCAGTTACCCTGGGGGTCTTAACGCCCCCGCAGGCATGGGCATCCCTCC
GCACACCAGGCCGCTGCTGACTTCACTCAGCCCCGCGGCAGCCGCTGCAGCAGCGGCAGTGGCAGCAGCAGCAGC
CACAGCTACAGCCACAGCCACGGCCACTGTGGCAGCCCTGCAGGAGACACAGAACAAGGATATAAACAGTATGG
ACCGGTCTGTTCTCTTTCCAGATGGGTCCACCCAGGCGTATAACAGCCAATTCATGAACCAGCCCCGGCCGCG
GGGGCTGCCTCCATGGGGGGCAGCATGAACCCCGCAGCATGGCGGCTGGCATGACGCCCTCGGGGATGAGCGG
CCCTCCCATGGGCATGAACCAGCCCCGGCCGCGCCGGCATCAGCCCTTTGGCACACAGGGCAGCGGATGCCCCA
GCAGACCTACCCGGGCCCGCCGCCAGTCCCTTCTATTAGAACATAAAGAGGCCATACCTTGGAGAGGTGAG
TGCAGCAGTGGGAGCCTGGGAGGTGGGAACCTGGGACACCTGGGCTTGAAGACATGGGCCGTGGGTACGGCTTTGG
AAGGGGTGTGGCTTGGACTCCAGCACACTTGGACAAAGAGGCAGGGGCTTAGGGGTGAGGTGCTCCTGGGTTTGA
GACCTGGTTCTGCTGTTTTCCCACTGAAAGACCTCGAGCCAGTCACCCTGCCTCCTAGGGCTGCTTGAGGGACTT
GAGGAGGTGTCCGTGAAGTGCTTGGCCCTGGGCTGGCATGTGCCGCCACTCAGCAAGCAGCAGTTCCTCTTACTG
TAGTGACTCTTGTCTTGGCTCAGCCACTAAGTGGGTGACCTGGGTTTAGTTCTCCTGCCACATGAGAGCTTCC
CCAACCTCCTCTCCAAGAAAGAGAGCTGAGACAAAATGCTTCCAGTCTATAAGGGCTGACCCGTCCGGGAAGTGAC
TGGAAAGGCAGGCAGCGTGTTCAGTCTGTAAGGATTGACCTGTTGGGGAAGTGACTGGAAGGCAGAGAGCGTGT
TTCCAATCTATAAGGACTGACCCGTTGGGGAAGTGACTGGAAGGCCGGCAGCTGTTTCCAGTCTATAAGGACTGA
CCCGTCAGGGAAGTGACTGGAAGGCAGACAGCGTGTTCCTTAGCTCTTGTTTCCATCCACACTTGGTCACTGTAT
AGGAAGTGGCACTGCCTCTTGGGCTGCACAGCCAGCTCAGCCAAGGTGTTGGGGAAGATTGGGGGAAGTAAACC
CACACCTCCTGCCCTCTGGGAAGTGAGGTTTTAGCAGGAAAGAAAAGTTTTAGCAGAGACTCACCAGGGAATGA
AGCATAGCAGACTGCACAGAAGTCAATATGAGTCAGAGAAGGCAGGCTTCTGGAGGGTGTGTCACAAGTAAATC
CTCAGAAAATGATGCTGGCAGCAGCTGGCCCATCTGGGTACCCAGGTAAGGATTTAGTTTACCTGCAGAAGACGT
AGGGACGTGGCTCTGCAGATGCCCCCTCGTGAAGCCCTGGTTGCTCCCCACGACCAAGCCCCTTTTTGAGCAGGGT
GTGCCAGCTCTCTGCCTGCCTCCCTCCCAGCTTGCATGCCCACTCTCAGAGCAGTTTCTCCTCCTAGCTCCTC
TCAGCTCTGTGGCCTTACCTTGGGTTTACAGCGGCTTTAGATTCCAAAGACCTTAAGTTCCCTTGAAGATCTGCA
CATTTCCCCTCAGTATCCACCTTAGGATGGGCGGGGAGGCTTGGCAACAAGTGGAGGTATTCTGAGTTCAGGAGG
GGAGAGAGAGGGGGGGGGGTCAGGGGCTTCTCATGCATCCAAGAAGCTGGATCAAGCCCCAACCTCCACCTGG
TGGACACTAGTTTCAAGGAGGGGCCAGAGAAGGACCATTTGGCTCCTGGGTCTGAGTTTGGGGGAGCCTCAAGCTA
TTGGCACCTCTCCTGGCACTCAGGCCCCATGCAGTTTCTAGGCCTTTTCTCAGCCACCTGTGCTCAAAATCCCA
GTGTCCCACTGGCTGTGCTGGGGGTGCATCTGTTAGCCACGCCAAAGGAGGCAATCTCGGATGAGGCTTCAGCA
GAATTCCTGGTCATTGGTGTACCCCTGCACCTGCACCTGTGCCATGCTTATGGCTCTTGCCTGCCTAAAGAGAG
CACACCAAAGGCTCTCCATATTTTTACTAAATTAATCATCCTTTTCATAGAGTGCTGCTGTACCCAGCTACAGC
ACTGGGTGGTCACAGCCTATGCGGCCTGATCCTGTCTGGAAGACTGGCCTTCTTCCCTTGCCATGGCTTGTTT
ATACAATATTTGAATTGTTGGAGCCTTAGGACAGGGGTGGGTCTCTGGTCCCACAGAGGACTCTCTTCTCTAG
CTTGGTGGGCAGGTAGGCACAGCTACGTCTTCTATACCTCCTGTGGTGGGTGCCTCACTGTCACCCAGAGCAGC
CACCATGTTGCAACAACGTGAGTTGTAGATTCTTCCACACTGACACTTTCTGACATTTATCCCTAAGTCCATCAT
TCGTTTGTGTAGCAAGTATTAAGGGTATTTTCCAGGCACTGGGGCACAGCCACCAACAGGACCTCTGGGCAAGA
GAGACACTCAGATGGGGAAGAAGAAACCACTGACTCACAGGATGTATGTGGCCGTGAGGGTCACCTGATTTTCC
AGACAGGGAAGGTGGCTGGAGGGTGGTGTCTCTCTCTCTCTCTAAATTGTCTGTCCCGGGAGAAGTTGTCTTGT
TCCTTACCAACCTGGCTCTCCACCTCCTGCACAGGTGGCAGGTTGTCGATGGCCAGAACTGAACACTAGGTG
TGTGTTCTGCTCTGAGGGGAGTACGAGGACAATGCCACCAAGTTAGCCTTGGAAATGCAGGGGCACAGGGGGCT
CCTTTCTGGAATTGCATCCTGTTGACTGTGTTCTCTGTACATTGGGGTACACATTGGGGAGCACAGGCCCTAAC
CCAGGCACCGAGAGAGACACAAAGGTGGGGGAGTTAGAATCAGGCCCTCATATGGTGTGAGCAAGAGGCTCT
GAAAGTGTCCCTGGAGTTGAGGGGCACATGTGCTCCAGGAAGAACGGCCTCAAGGGGAGGTGGCCTATGATCTGG

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FIGURE 2984B

ACAGGCAGAACAAAATGCCCTGGATGTCAGGACGAGAAGGGGCCCAAAGCATTATCTGGTTTTGTGGGTGGGAA
ACAGCAGGAGCAAATGAGGAGAGGCGGGCCCCATCCCGTTGTTTCAGGTGACCTGGCTATGTGACGTTGGCAACAT
TGAACGTGTTCCCTCTCCTTTCTCTCCACCACAGCCCAACTATGGAAACCAGCAATATGGACCAAACAGCCAG
TTCCCCACCCAGCCAGGCCAGTACCCAGCCCCCAACCCCCGAGGCCACTCACCTCCCCCAACTACCCAGGACAG
AGGATGCCCAGCCAGCCGAGCTCCGGGCAGTACCGCCCCCACGGTCAACATGGGGCAGTATTACAAGGTGAGT
CCCAGCCTCGCCACCACCCACGGGGCCCCCTTCCTCCTAACCACCTCACTCCCCTAACTCCACCGGGATCACTCT
GACCTTGCCTGTGTTTGCCCCAAGGACAGCGAGGGGTGGGTGATTTCTGAACGTCCCCATGTGTTTCAGGGCGAAG
TTCGGTGGCCAGAATGTCAGAGTGGCTTTTCTCAGTTCCTATTCTCATTCTCGTCTCGGATGATGGTTTTTTTTTCT
CCTTTCTTATTACGGCACTCACAAAATAATAAAGGAAATATATTTTATT

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FIGURE 2985

MNSMDRHIQQTNDRLQCIKQHLQNPANFHNAATELLDWCGRPRAFQRPFQSLMGCLTVVSRVAAQQGFDDLGY
RLAVCAANRDKFTPKSAALLSSWCEELGRLLLLRHQKSRQSDPPGKLPMQFPLSSMSSMKPTLSHSDGSFPYDS
VPWQQNTNQPPGSLSVVTTVWGVNTNTSQSQVLGNPMANANNPMNPGGNPMASGMTTSNPGLNSPQFAGQQQQFSA
KAGPAQPYIQQSMYGRPNYPGSGGFGASYPGGPNAPAGMGIPPHTRPPADFTQFAAAAAAAVAAAAATATATAT
ATVAALQETQNKDINQYGPVCSSFQMGPTQAYNSQFMNQPGPRGPASMGGSMPASMAAGMTPSGMSGPPMGMNQ
PRPPGISPFGTHGQRMPPQQTYPGPRPQSLPIQNIKRFPYPGEVSAAVGAWEVGTGTPGLEDMGRGYGFGRGVAWTP
AHLDEKEAGA

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TCTGGGCGCGCGACGTCAAGTTTGTGTTCTCCCCGCCGTGTCCCGCCGCCGCCGCCGCCGCGATGC
TGGCGCTGCGCTGCGGCTCCCCGCTGGCTCGGCCTGCTCTCCGTCCCCGCTCCGTGCGCCTCCCCGCG
CCCCGCGCTGCAGCAAGGGCTCCGGCGACCCGTCCTCTTCTCTCTCCGGGAACCCGCTCGTGTAACCTGGACG
TGGACGCCAACGGGAAGCCGCTCGGCCGCTGGTGCTGGAGCTGAAGGCAGATGTCGTCCCAAAGACAGCTGAGA
ACTTCAGAGCCCTGTGCACTGGTGAGAAGGGCTTCGGCTACAAAGGCTCCACCTTCCACAGGGTGATCCCTTCCT
TCATGTGCCAGGCGGGCGACTTCACCAACCACAATGGCACAGGCGGGAAGTCCATCTACGGAAGCCGCTTTCCTG
ACGAGAACTTTACACTGAAGCAGTGGGGCCAGGTGTCCTGTCCATGGCTAATGCTGGTCTAACACCAACGGCT
CCCAGTTCTTCATCTGCACCATAAAGACAGACTGGTTGGATGGCAAGCATGTTGTGTTTCGGTCACGTCAAAGAG
GCATGGACGTCGTGAAGAAAAATAGAATCTTTTCGGCTCTAAGAGTGGGAGGACATCCAAGAAGATTGTCATCACAG
ACTGTGGCCAGTTGAGCTAACTCTGTGGCCAGGGTGTGGCATGGTGGCAGCTGCAAATGTCCATGCACCCAGGTG
GCCGCGTTGGGCTGTAGCCAAAGTGCCTGAAACGATACGTGTGCCACTCCACTGTCACAGTGTGCTGAGGAA
GGCTGCTAGGGATGTTAGACCTCGGCCAGGACCCACCACATTGCTTCCTAATACCCACCCTTCCTCACGACCTCA
TTTCTGGGCATCTTTGTGGACATGATGTCACCCACCCCTTGTCAAGCATTGCCTGTGATTGCCAGCCCAGATT
ATCTGTGCCATTGGACATGGTGATGGTGATGGGTTGCCATCCAAGTGAAGTCTTTTCTTGACCAAGGGGGACAG
TCAGTTTTTGCAAAGGACTCTAATACCTGTTTAAATATTGTCTTCCTAATTGGGATAATTTAATTAACAAGATTGA
CTAGAAGTGAACTGCAACACTAACCTCCCCGTGCTGTGGTGTGACCTGAGTTGGTGACACAGGCCACAGACCCC
AGAGCTTGGCTTTTGAAACACAACCTCAGGGCTTTTGTGAAGTTCCCCCGCTGAGATCTTTCTCTCTGGTTACTG
TGAAGCCTGTTGGTTTGTGCTGTGCTTTTTTGAGGAGGGCCCATGGGGGTAGGAGCAGTTGAACCTGGGAACAAA
CCTCAGTTGAGCTGTGCCTAGACAATGTGAATTCCTGTGTTGCTAACAGAAGTGGCCTGTAAGCTCCTGTGCTCC
GGAGGGAAGCATTTCTGGTAGGCTTTGATTTTTCTGTGTGTTAAAGAAATTCAATCTACTCATGATGTGTTATG
CATAAAACATTTCTGGAACATGGATTTGTGTTACCTTAAATGTGAAAATAAATCCTATTTTCTATGGAAAAAA
AAAAAAAAAAAAAAAA

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FIGURE 2987

MLALRCGSRWLGLLSVPRSVPLRLPAARACSKGSGDPSSSSSSGNPLVYLDVDANGKPLGRVVLELKADVVPKTA
ENFRALCTGEKGFGYKGSTFHRVIPSFMCQAGFTNHNGTGGKSIYGSRFPDENFTLKHVGPVLSMANAGPNTN
GSQFFICTIKTDWLDGKHVVFGHVKEGMDVVKKIESFGSKSGRTSKKIVITDCGQLS

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FIGURE 2988

ATGAGGAGCAGGAGCACACGTCCAGAACCAAAGCAGAGCGGTGTCCACGCCACTGCAAGCAGCAGGTCCAGATCC
CACATTCCCACAGGAGCCATGGCAAAGGCCTGTGAGCCTGGGGCAGCTCCACCCCAAGAATCAGGGTCCCCAGTG
CACCGGGACTCCGCTCCAAGGAGGAATGCAACCAGTTCCAGGGGGAACGGCCAGTGTGTTGCACGGTGGATGTGC
TCAAGCTCCCGTTTGTCTCATCAGCGGGAAACACAGGGTCACAGAGGCACCGCAGGGTGGAGAGAGGCAGGGACTG
GGAATGAAACCACAACTCTCCCAGATGCTGACGTTGCTGCCTCACAGTCACCACAGTCCATGGCCCTGGGCTGC
TGGACTCATGGTGCACCTCAGAGCTATCACTGGAGCCCCTGGCTTTGGGGAGTGCTCTCCTAGATGGCCTAGTCTT
GATAATGATAGTAATGGGGACAGTAATCTGCAGCCCATACCCTCACAACCGCCCTGCAAGCTCCCCTGAACAGC
GTGACCTCCCGTCCATCCAGCAGCCTCTTTACGTGTGAGCTGCAGGACCAGCTCCAATGCCCCGAGGACACTCAC
ATGAGGAAGCACGAAAGCGCTTCGGTGTGAGGACTCTGGGGAAGAGGGCGCCTGGAGCCTGCCAGACGAGGGGGG
CCTGAGTTAGGACCAAGGTCTGCGCCTGAGCGGCCTTCACAGGCCCCACCTCTGTCTCATCTGGACAAAGACGT
TGGAAGCCCCCGCCCCACTCGGGCTGCAGCCATCCTGTTCTGTACCAGAGACCCTGTCAGCCTCACAGGCATCT
CCCAAGCCATGGGTGAGGGATGAGTCTCTCAGCGGCCTGGTGGTCTCAGCGTGCTCAGCAACAGGCTTACCTCC
ATTGGAAGCCATCCCCTCAGGCTGGGCACTGACCACCGCCGTCTGGCAGTTTCCGCAATAAGAAAAGCCAAGGGA
GCCTTGAGGCGGGCGAGGTTCCAGCGCGAGGCGGCCGCCCTCAACCGCTCCCAGCGCCAGTTGCGGCGGTTGAT
GGCAGGGAGACGCGCAGCGGAGAGCAAAGGGCGGTGACCCAACGGCCTTCGCTCTCATGGCGTCCCTTCTTGGTG
TTACCTAAAAATAAAGCCAAGGGTGATCAGAAGCGAGGGACGCTGGCCTTCTCGCGGCTTTCCCCGATATCTCT
CTTTATTCCAGCTGCCTGAAACTCGGTCCCACGAATGGCAGGCAGCGTCCAAAATTCAACCCCGTAAAGCCAGCA
CCAGCCAATAAAGCGCACGGATGGAGGCCACGTGACAGCAGTGGGCGCGCCCTCCGGCTGAGCCCTGATCTCTAT
GGTTTCCGCGGCTCGCTAGAAGGAGTGTGGTCCACCGGAGGACTCCCTACATTCTTCTCCTCCATTACCTCACTGCC
TCCGGTGGCTGCTGGGATACCGGAGGACTCGGCGCGTCCGGCCCGCCCGCAGGCCAGCTTCTCTCGGGAGCCCCC
ACCCAGGCGCATGGCTCCATGAAGCAAGAGGAGGAGGCAGAGCGCGAGAGGTCCCGTCCGCCCCAGCCGCGTCTG
GGCCAGGATAAAAGAGACCCCCGCGGTCTGGGGCGAGGGTCCGGGGGCAGCCAAAACCATATTCTGCTGCTGTC
AGTTATGATGCACTGAGAAAACCTTCAGAGACCTAACTTTTTCCAGAGAAGAGAAGCTTTACTGGTGTTCAGCC
CTAAGCATTGACTTCACTAATGGATGTGACCTGGTTGGCAGCAGTAGCTTGACACAACATGCTTGTTTGCAAAACC
TTTGTTCAGAAAACGGCAGATGCTCTGTTGAATCCACTGGAGATTGTTCTGATACTAAGGACAAGTATGCTCAT
ATGACATTAAACAGACAAGACACTTTTCAGAAAGACAGTTGCTAATGGTAATGATGAAAATAATGTCATCATCAGG
TATTATTAGCTATTGGAAGAAACCACTCGGTGTGAGTTTCATCAAGGAATCTGTACAGATGTGA

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FIGURE 2989

MSRNEINAIQRECKTCNLRILCFRINPPKQGCYLGAWTAGLYYRKLGIVADALVSQRHGHGGSNEGALSGPRKH
PGALRRARFQREAGRPQPLPAPVAAVDGRETRSARAKGGDPTAFALMASFLVLPKNKAKGDQKRGTlafSRLSPD
ISLYSSCLKLGPtNGRQRPKFNPVKPAPANKAHGWRPRDSSGPALRLSPDLYGFRGSLEGVWSTGGLPTFFLHYL
TASGGCWDtGGGLGASGPPAGQLLSGAPTQAHGSMKQEEEEAERERSRPPQRLGQDKRDP AVLGRGSGGSQNHIPa
AVSYDALRKLQRPKLFPEKRSFTGVPALSIDFTNGCDLVGSSSLHNMLVCKTFVQENGRCsVESTGDCSDTKDKY
AHMTLTDKTLFRKTVANGNDENNVIIRYYLAIGRNHsvSSSSRNLSQM

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FIGURE 2990

GCTGCTGCGCCCGCGGCTCCCCAGTGCCCCGAGTGCCCCGCGGGCCCCGCGAGCGGGAGTGGGACCCAGCCCTAG
GCAGAACCCAGGCGCCGCGCCCGGGACGCCCCGCGGAGAGAGCCACTCCCGCCACGTCCCATTTTCGCCCCCTCGCG
TCCGGAGTCCCCGTGGCCAGATCTAACCATGAGCTACCCTGGCTATCCCCGCCCCCAGGTGGCTACCCACCAGC
TGCACCAGGTGGTGGTCCCTGGGGAGGTGCTGCCTACCCTCCTCCGCCCAGCATGCCCCCATCGGGCTGGATAA
CGTGGCCACCTATGCGGGGAGTTCAACCAGGACTATCTCTCGGGAATGGCGGCCAACATGTCTGGGACATTTGG
AGGAGCCAACATGCCAACCTGTACCCTGGGGCCCCCTGGGGCTGGCTACCCACCAGTGCCCCCTGGCGGCTTTGG
GCAGCCCCCTCTGCCCAGCAGCCTGTTCTCCCTATGGGATGTATCCACCCCCAGGAGGAAACCCACCCTCCAG
GATGCCCTCATATCCGCCATACCCAGGGGCCCCCTGTGCCGGGGCCAGCCCATGCCACCCCCGGACAGCAGCCCCC
AGGGGCCTACCCTGGGCAGCCACCAGTGACCTACCCTGGTCAGCCTCCAGTGCCACTCCCTGGGCAGCAGCAGCC
AGTGCCGAGCTACCCAGGATACCCGGGGTCTGGGACTGTACCCCCGCTGTGCCCCAACCCAGTTTGAAGCCG
AGGCACCATCACTGATGCTCCCGGCTTTGACCCCCGCGAGATGCCGAGGTCTGCGGAAGGCCATGAAAGGCTT
CGGGACGGATGAGCAGGCCATCATTGACTGCCTGGGGAGTCGCTCCAACAAGCAGCGGCAGCAGATCCTACTTTC
CTTCAAGACGGCTTACGGCAAGGATTTGATCAAAGATCTGAAATCTGAACTGTCAGGAAACTTTGAGAAGACAAT
CTTGCTCTGATGAAGACCCAGTCCTCTTTGACATTTATGAGATAAAGGAAGCCATCAAGGGGGTTGGCACTGA
TGAAGCCTGCCTGATTGAGATCCTCGCTTCCCGCAGCAATGAGCACATCCGAGAATTAAACAGAGCCTACAAAGC
AGAATTCAAAAAGACCCTGGAAGAGGCCATTGGAAGCGACACATCAGGGCACTTCCAGCGGCTCCTCATCTCTCT
CTCTCAGGGAAACCGTGATGAAAGCACAAACGTGGACATGTCACTCGCCCAGAGAGATGCCCAGGAGCTGTATGC
GGCCGGGGAGAACCCTGGGAACAGACGAGTCCAAGTTCAATGCGGTTCTGTGCTCCCGAGCCGGGCCCCACCT
GGTAGCAGTTTTTCAATGAGTACCAGAGAATGACAGGCCGGGACATTGAGAAGAGCATCTGCCGGGAGATGTCCGG
GGACCTGGAGGAGGGCATGCTGGCCGTGGTGAAATGTCTCAAGAATACCCAGCCTTCTTTGCGGAGAGGCTCAA
CAAGGCCATGAGGGGGCAGGAACAAAGGACCGGACCCTGATTGCGATCATGGTGTCTCGCAGCGAGACCGACCT
CCTGGACATCAGATCAGAGTATAAGCGGATGTACGGCAAGTCGCTGTACCACGACATCTCGGGAGATACTTCAGG
GGATTACCGGAAGATTCTGCTGAAGATCTGTGGTGGCAATGACTGAACAGTGACTGGTGGCTCACTTCTGCCCAC
CTGCCGGCAACACCAGTGCCAGGAAAAGGCCAAAAGAATGTCTGTTTCTAACAAATCCACAAATAGCCCCGAGAT
TCACCGTCCTAGAGCTTAGGCCTGTCTTCCACCCCTCTGACCCGTATAGTGTGCCACAGGACCTGGGTCGGTCT
AGAACTCTCTCAGGATGCCTTTTCTACCCCATCCCTCACAGCCTCTTGCTGCTAAATAGATGTTTCATTTTCT
GAAAAAA

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FIGURE 2991

MSYPGYPPPPGGYPPAAPGGGPWGGAAYPPPPSMPPIGLDNVATYAGQFNQDYLSGMAANMSGTFGGANMPNLYP
GAPGAGYPPVPPGGFGQPPSAQQPVPPYGYPPPPGGNPPSRMPSYPPYPGAPVPGQPMPPPGQQPPGAYPGQPPV
TYPGQPPVPLPGQQQPVPSYPGYPGSGTVTPAVPPTQFGSRGTITDAPGFDPLRDAEVLKAMKGFGTDEQAIID
CLGSRSNKQRQQIILLSFKTAYGKDLIKDLKSELSGNFECTILALMKTPVLFDIYEIKEAIKGVGTDEACLEILA
SRSNEHIRELNRAYKAFFKKTLEEAIRSDTSGHFQRLILSLSQGNRDESTNVDMSLAQRDAQELYAAGENRLGTD
ESKFNAVLCSRSRAHLVAVFNEYQRMTRDIEKSICREMSGDLEEGMLAVVKCLKNTPAFFAERLNKAMRGAGTK
DRTLIRIMVSRSETDLLDIRSEYKRMYGKSLYHDISGDTSGDYRKILLKICGGND

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FIGURE 2992

GGTAGAGGCGGCGGCGGCGGCGGCGGCGGCGGCTCGGAGGCAGCGGTTGGGCTCGCGGCGAGCGGACGGGGTTCGAGT
CAGTGCCGTTTTCGCCAGTTGGAATCGAAGCCTCTTAAATGCGCAGATGATTTGGACTTCGAGACAGGAGATGCA
GGGGCCTCAGCCACCTTCCCAATGCAGTGCTCAGCATTACGTAAGAATGGCTTTGTGGTGCTCAAAGGCTGGCCA
TGTAAGATCGTGGAGATGTCTGCTTCGAAGACTGGCAAGCACGGCCACGCCAAGGTCCATCTGGTTGGTATTGAC
ATCTTTACTGGGAAGAAATATGAAGATATCTGCCCGTCAACTCATAATATGGATGTCCCCAACATCAGAAGGAAT
GACTTCCAGCTGATTGGCATCCAGGATGGGTACCTATCACTGCTCCAGGACAGCGGGGAGGTACCAGAGGACCTT
CGTCTCCCTGAGGGAGACCTTGGCAAGGAGACTGAGCAGAAGTACGACTGTGGAGAAGAGATCCTGATCACGGTG
CTGTCTGCCATGACAGAGGAGGCAGCTGTTGCAATCAAGGCCATGGCAAAATTAAGTGGCTCCCAAGGTGGCAGTG
GTGGCAGCAGTGATCCTCCGAACCTGCAGAGGCCCTCCCCAGCCTGGCCTGGCTCTGGCCTGGTCCCTAGGCT
GGACTCCTCCTACACAATTTATTTGACGTTTTATTTTGGTTTTCCCCACCCCTCAATCTGTCAGGGAGCCCCCTG
CCCTTACCTAGCTCCCTTGGCCAGGAGCGAGCAAAGCCGTGGCCTTGGTGAAGCTGCCCTCCTCTTCTCCCCCTC
ACACTACAGCCCTGGTGGGGGAGAAGGGGGTGGGTGCTGCTTGTGGTTTAGTTTTTTTTTTTTTTTTTTTTTAAT
TCAATCTGGAATCAGAAAGCAGTGGATTCTGGCAAATGGTCCTTGTGCCCTCCCCACTCATCCTTGGTCTGGTCC
CCTGTTGCCCATAGCCCTTTACCCTGAGCACCACCAACAGACTGGGGACCAGCCCCCTCGCCTGCCTGTGTCTC
TCCCCAAACCCCTTTAGATGGGGAGGGAAGAGGAGGAGAGGGGAGGGGACCTGCCCCCTCCTCAGGCATCTGGGA
AGGCCCTGCCCCCATGGGCTTTACCCTTCCCTGAGGGCTCTCTCCCCGACACATTTGTTAAATCAAACCTGAAT
AAAACCTACAAGTTTAAATATG

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FIGURE 2993

MADDLDFETGDAGASATFPMQCSALRKNGFVVLKGWPCKIVEMSASKTGKHGHAKVHLVGIDIFTGKKYEDICPS
THNMDVPNI¹RRNDFQLIGIQDGYLSLLQDSGEVPEDLRLPEGDLGKETEQKYDCGEEILITVLSAMTEEA²AVAIK
AMAK

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FIGURE 2994

GTCAGTGCCGTTTGCGCCAGTTGGAATCGAAGCCTCTTAAAATGGCGAGATGATTGGACTTCGAGACAGGAGATG
CAGGGGCCTCAGCCACCTTCCCAATGCAGTGCTCAGCATTACGTAAGAATGGCTTTGTGGTGCTCAAAGGCTGGC
CATGTAAGATCGTGGAGATGTCTGCTTCGAAGACTGGCAAGCACGGCCACGCCAAGGTCCATCTGGTTGGTATTG
ACATCTTTACTGGGAAGAAATATGAAGATATCTGCCCCTCAACTCATAATATGGATGTCCCCAACATCAGAAGGA
ATGACTTCCAGCTGATTGGCATCCAGGATGGGTACCTATCACTGCTCCAGGACAGCGGGGAGGTACCAGAGGACC
TTCGTCTCCCTGAGGGAGACCTTGGCAAGGAGACTGAGCAGAAGTACGACTGTGGAGAAGAGATCCTGATCACGG
TGCTGTCTGCCATGACAGAGGAGGCAGCTGTTGCAATCAAGGCCATGGCAAAATAACTGGCTCCCAAGGTGGCAG
TGGTGGCAGCAGTGATCCTCTGGCCTGGTCCTAGGCTGGACTCCTCCTACACAATTTATTTGACGTTTATTTTG
GTTTTCCCCACCCCTCAATCTGTCAGGGAGCCCCTGCCCTTACCTAGCTCCCTTGGCCAGGAGCGAGCAAAGC
CGTGGCCTTGGTGAAG

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FIGURE 2995

MADDLDFETGDAGASATFPMQCSALRKNGFVVLKGWPCKIVEMSASKTGKHGHAKVHLVGIDIFTGKKYEDICPS
THNMDVPNIRRNDNFLIGIQDGYLSLLQDSGEVPEDLRLPEGDLGKETEQKYDCGEEILITVLSAMTEEA AVAIK
AMAK

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FIGURE 2996

GGCACGAGGAGGTGTGGACGCTGTGTATGAAATGTCTTTCTCCAGGACCCAAGTTTCTTCACCATGGGGATGTG
GTCCATTGGTGCAGGAGCCCTGGGGGCTGCTGCCTTGGCATTGCTGCTTGCCAACACAGACGTGTTTCTGTCCAA
GCCCCAGAAAGCGGCCCTGGAGTACCTGGAGGATATAGACCTGAAAACACTGGAGAAGGAACCAAGGACTTTCAA
AGCAAAAGGAGCTATGGGAAAAAATGGAGCTGTGATTATGGCCGTGCGGAGGCCAGGCTGTTTCTCTGTGCGAGA
GGAAGCTGCGGATCTGTCTCCCTGAAAAGCATGTTGGACCAGCTGGGCGTCCCCCTCTATGCAGTGGTAAAGGA
GCACATCAGGACTGAAGTGAAGGATTTCCAGCCTTATTTCAAAGGAGAAATCTTCCTGGATGAAAAGAAAAAGTT
CTATGGTCCACAAAGGCGGAAGATGATGTTTATGGGATTTATCCGTCTGGGAGTGTGGTACAACCTTCTCCGAGC
CTGGAACGGAGGCTTCTCTGGAACCTGGAAGGAGAAGGCTTCATCCTTGGGGGAGTTTTCTGTGGTGGGATCAGG
AAAGCAGGGCATTCTTCTTGAGCACCGAGAAAAAGAATTTGGAGACAAAGTAAACCTACTTTCTGTTCTGGAAGC
TGCTAAGATGATCAAACCACAGACTTTGGCCTCAGAGAAAAATGATTGTGTGAAACTGCCAGCTCAGGGATAA
CCAGGGACATTCACCTGTGTTTATGGGATGTATTGTTTCCACTCGTGTCCCTAAGGAGTGAGAAACCCATTTATA
CTCTACTCTCAGTATGGATTATTAATGTATTTTAATATTCTGTTTAGGCCCACTAAGGCAAAATAGCCCCAAAAC
AAGACTGACAAAAATCTGAAAACTAATGAGGATTATTAAGCTAAAACCTGGGAAATAGGAGGCTTAAAATTGAC
TGCCAGGCTGGGTGCAGTGGCTCACACCTGTAATCCCAGCACTTTGGGAGGCCAAGGTGAGCAAGTCACTTGAGG
TCGGGAGTTCGAGACCAGCCTGAGCAACATGGCGAAACCCCGTCTCTACTAAAAATACAAAAATCACCCGGGTGT
GGTGGCAGGCACCTGTAGTCCCAGCTACCCGGGAGGCTGAGGCAGGAGAATCACTTGAACCTGGGAGGTGGAGGT
TGCGGTGAGCTGAGATCACACCACTGTATTCCAGCCTGGGTGACTGAGACTCTAACTAAAAAAAAAAAAAAAAAAA
AAA

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FIGURE 2997

MWSIGAGALGAAALALLANTDVFLSKPQKALEYLEDIDLKTLEKEPRTFKAKELWEKNGAVIMAVRRPGCF
LC
REEAADLSSLKSMLDQLGVPLYAVVKEHIRTEVKDFQPYFKGEIFLDEKKKFYGPQRRKMMFMGFIRLGVWYNFF
RAWNGGFSGNLEGEFILGGVFVVGSGKQGILLEHREKEFGDKVNLLSVLEAAKMIKPQTLASEKK

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FIGURE 2998

GTCAATGCAGTGCGCCGGAGGAACTGTGCTCTTTGAGGCCGACGCTAGGGGCCCGGAAGGGAACTGCGAGGCCGAA
GGTGACCGGGGACCGAGCATTTTCAGATCTGCTCGGTAGACCTGGTGCACCACCACCATGTTGGCTGCAAGGCTGG
TGTGTCTCCGGACACTACCTTCTAGGGTTTTCCACCCAGCTTTACCAAGGCCTCCCCTGTTGTGAAGAATTCCA
TCACGAAGAATCAATGGCTGTTAACACCTAGCAGGGAATATGCCACCAAAACAAGAATTGGGATCCGGCGTGGGA
GAACTGGCCAAGAAGCTCAAAGAGGCAGCATTGGAACCATCGATGGAAAAAATATTTAAAATTGATCAGATGGGAA
GATGGTTTGTGTGCTGGAGGGGCTGCTGTTGGTCTTGGAGCATTGTGCTACTATGGCTTGGGACTGTCTAATGAGA
TTGGAGCTATTGAAAAGGCTGTAATTTGGCCTCAGTATGTCAAGGATAGAATTCATTCCACCTATATGTACTTAG
CAGGGAGTATTGGTTTAACAGCTTTGTCTGCCATAGCAATCAGCAGAACGCCTGTTCTCATGAACCTTCATGATGA
GAGGCTCTTGGGTGACAATTGGTGTGACCTTTGCAGCCATGGTTGGAGCTGGAATGCTGGTACGATCAATACCAT
ATGACCAGAGCCCAGGCCCAAAGCATCTTGCTTGGTTGCTACATTCTGGTGTGATGGGTGCAGTGGTGGCTCCTC
TGACAATATTAGGGGGTCTCTTCTCATCAGAGCTGCATGGTACACAGCTGGCATTGTGGGAGGCCTCTCCACTG
TGGCCATGTGTGCGCCAGTGAAAAGTTTCTGAACATGGGTGCACCCCTGGGAGTGGGCCTGGGTCTCGTCTTTG
TGTCTCATTTGGGATCTATGTTTCTTCCACCTACCACCGTGGCTGGTGGCACTCTTTACTCAGTGGCAATGTACG
GTGGATTAGTTCTTTTTAGCATGTTTCTTCTGTATGATACCCAGAAAGTAATCAAGCGTGCAGAAATATCACCAA
TGTATGGAGTTCAAAAATATGATCCCATTAACCTCGATGCTGAGTATCTACATGGATACATTAAATATATTTATGC
GAGTTGCAACTATGCTGGCAACTGGAGGCAACAGAAAGAAATGAAGTACTCAGCTTCTGGCTTCTCTGCTACAT
CAAATATCTTGTTTAAATGGGGCAGATATGCATTAAATAGTTTGTACAAGCAGCTTTCGTTGAAGTTTAGAAGATA
AGAAACATGTCATCATATTTAAATGTTCCGGTAATGTGATGCCTCAGGTCTGCCTTTTTTCTGGAGAATAAATG
CAGTAATCCTCTCCCAAATAAGCACACACATTTTCAATTCTCATGTTTGTGAGTGATTTTAAATGTTTTGGTGAAT
GTGAAAACATAAGTTTGTGTGTCATGAGAATGTAAGTCTTTTTTCTACTTTAAATTTAGTAGGTTCACTGAGTAAC
TAAAATTTAGCAAACCTGTGTTTGCATATTTTTTGGAGTGCAGAAATATTGTAATTAATGTCATAAGTGATTTGG
AGCTTTTGGTAAAGGGACCAGAGAGAAGGAGTCACCTGCAGTCTTTTGTTTTTTAAATACTTAGAACTTAGCACT
TGTGTTATTGATTAGTGAGGAGCCAGTAAGAAACATCTGGGTATTGGAAACAAGTGGTCATTGTTACATTCATC
TGCTGAACCTTAACAAAACCTGTTTCATCCTGAAACAGGCACAGGTGATGCACTTCTCCTGCTGTTGCTTCTCAGTGCT
CTCTTTCCAATATAGATGTGGTCATGTTTGACTTGTACAGAATGTTAATCATAACAGAGAATCCTTGATGGAATTA
TATATGTGTGTTTTACTTTTTGAATGTTACAAAAGGAAATAACTTTAAACTATTCTCAAGAGAAAAATATCAAAG
CATGAAATATGTTGCTTTTTCCAGAATACAAACAGTATACTCATGATTGCTAAGTGTTTTTTATTTTTGCATAT
TTATTGAAGTGTCTAATTGAATACAGCTTGCTCTTGTACCTCTTCAAGCTTTCAAGCCTTTATAGAAAAGCTTC
TTTGTGGCTTACACTGGAAATTATGAAAGCAGTTTTTCTCCTAAGACTTTTGGTTTTCTCGCATTGCCTCTCAGAC
TAAGCACTAAAAAGCAAAGCAAAACAGAACTAGTTCTGTCTTAATGAAATATATCAACCCAAAAGTGAATGAGG
AAAATGCTTCATTAGTTTTCCCTAGCAGACTTTTACTTCTCTTACACTGCTACACCATTACTTTCTTGAGACATT
TGTAAGTTCTTTGATACAGAAGAGTTATATTTAGAAGTCTTTAATGAAGG

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FIGURE 2999

CAGGACCCAAGGAACCAAAATTGCATCTGATGGTCGTGTGTTTGAAGTGAGTCTTGCTGATTGTCAGAATGATGA
AGTTGCATTTAGAAAATTCAAGCTGATTACTGAAGATGTTTCAGGGTAAAAACTGCCTGACTAACTTCCATGGCGT
GGATCTTACCAGTGACAAAATGTGTTCCATGGTCAAAAAATGGCAGACAATGATTGAAGCTCACGTTGATGTCAA
GACTACCGATGGTTACTTGCTTCGTCTGTTCTGTGTTGGTTTTACTAAAAACGCAACAATCAGATACGGAAGAC
CTCTTATGCTCAGTACCAGCCAAATCCGGAAGAAGATGATGGAAATCATGACCCGAGAGGTGCAGACAAATGACT
TGAAAGAAGTGGTCAATAAATTGATTCCAGACAGCATTGGAAAAGACGTAGAAAAGGCTTGCCAATCTATTTATC
CTCTCCATGATGTCTTCGTTAGAAAAGTAAAAATGCTGAAGAAGCCCAAGTTTGAATTGGGAAAGCTCATGGAGC
TTCATGGTGAAGGCTGTAGTTCTGGAAAAGCCACTGGGGACGAGACAGGTGTTAAAGTTGAACGAGCTGATGGAT
ATGAACTACCAGTCCAAGAATCTGTTTAAATTCAGACTTCAAATAGTGTCAAATAAAAAGTGCTATT

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FIGURE 3000

CTGACCAGCACCA**ATCG**TGGTTGACAAGAACAAGCGCCTTACGAAAGGTGGCAAAAAGGGAGCCAAGAAGAAAGTG
GTTGATCCATTTTCTAAGAAAGATTGGTACGATGTGAACGCACCTGCTATGTTCAATATAAGAAATATTGGAAAG
ACGCTCGTCACCAGGACCCAAGGAACCAAAATTGCATCTGATGGTCGTGTGTTTGAAGTGAGTCTTGCTGATTG
CAGAATGATGAAGTTGCATTTAGAAAATTCAAGCTGATTACTGAAGATGTTTCAGGGTAAAAACTGCCTGACTAAC
TTCCATGGCGTGGATCTTACCAGTGACAAAATGTGTTCCATGGTCAAAAAATGGCAGACAATGATTGAAGCTCAC
GTTGATGTCAAGACTACCGATGGTTACTTGCTTCGTCTGTTCTGTGTTGGTTTTACTAAAAACGCAACAATCAG
ATACGGAAGACCTCTTATGCTCAGCACCAGCAGGTCCGCCAAATCCGGAAGAAGATGATGGAAATCATGACCCGA
GAGGTGCAGACAAATGACTTGAAAGAAGTGGTCAATAAATTGATTCCAGACAGCATTGGAAAAGACGTAGAAAAG
GCTTGCCAATCTATTTATCCTCTCCATGATGTCTTCGTTAGAAAAGTAAAAATGCTGAAGAAGCCCAAGTTTGAA
TTGGGAAAGCTCATGGAGCTTCATGGTGAAGGCTGTAGTTCTGGAAAAGCCACTGGGGACGAGACAGGTGTTAAA
GTTGAACGAGCTGATGGATATGAACTACCAGTCCAAGAATCTGTT**TAAA**ATTCAGACTTCAAATAGTGTCAAATA
AAAAGTGCTATT

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FIGURE 3001

MVVDKNKRLTKGGKKGAKKKVVDPFSSKDWYDVNAPAMFNIRNIGKTLVTRTQGTKIASDGRVFEVSLADLQND
VAFRKFKLITEDVQGKNCLTNFHGVDLTSDKMCSMVKKWQTMIEAHVDVKTTDGYLLRLFCVGF TKKRNNQIRKT
SYAQHQQVRQIRKKMMEIMTREVQTNDLKEVVNKLIPDSIGKDVEKACQSIYPLHDVFVRKVKMLKKPKFELGKL
MELHGECCSSGKATGDETGVKVERADGYELPVQESV

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FIGURE 3002

GGGAGAGTGAGGATGGCAGAGACCAGTGCCTTGCCACCGGCTTCGGGGAGCTCGAGGTGCTGGCTGTGGGGATG
GTGCTACTGGTGGAAGCTCTCTCCGGTCTCAGCCTCAATACCCTGACCATCTTCTCTTTCTGCAAGACCCCGGAG
CTGCGGACTCCCTGCCACCTACTGGTGCTGAGCTTGGCTCTTGCGGACAGTGGGATCAGCCTGAATGCCCTCGTT
GCAGCCACATCCAGCCTTCTCCGTGTCTCCACAGGCGCTGGCCCTACGGCTCGGACGGCTGCCAGGCTCACGGC
TTCCAGGGCTTTGTGACAGCGTTGGCCAGCATCTGCAGCAGTGCAGCCATCGCATGGGGGCGTTATCACCCTAC
TGCACCCGTAGCCAGCTGGCCTGGAACCTAGCCGTCTCTCTGGTGCTCTTCGTGTGGCTGTCTTCTGCCTTCTGG
GCAGCTCTGCCCCCTTCTGGGTGGGGTCACTATGACTATGAGCCACTGGGGACATGCTGCACCCTGGACTACTCC
AAGGGGGACAGAACTTCACCAGCTTCCTCTTCACCATGTCTTCTTCAACTTCGCCATGCCCCCTCTTCATCAG
ATCACTTCCTACAGTCTCATGGAGCAGAACTGGGGAAGAGTGGCCATCTCCAGGTAAACACCCTCTGCCAGCA
AGGACGCTGCTGCTCGGCTGGGGCCCCCTATGCCATCCTGTATCTATACGCAGTCATCGCAGACGTGACTTCCATC
TCCCCCAAAGTGCAGATGGTGCCCGCCCTCATTGCCAAAATGGTGCCACGATCAATGCCATCAACTATGCCCTG
GGCAATGAGATGGTCTGCAGGGGAATCTGGCAGTGCCTCTCACCAGAGAAGAGGGAGAAGGACCGAACCAAGTGA

GCCTGCCACCCTGGAGTGAGCCCCAGGCCAGGAGGCTGTTCAGGAGTCTGCCCCAGCAGCCTCGGTGGCCAAGC
CCAGACACTCACCACCTTCCCCAGTGGCCCCGTGGATCCTGGTCTAGGCTGGACACAGGATTGAGAAAGACAC
CAGGCTGCACAGAAAGAGCCAGATGGACCTGAGTGTGCGTCACAGCCCCCTACACTCAAGGCTGAGAGGCCTCAG
GAAAGTCATTCTTTTTAAAAATAATAATAATGTAAGGGGGTACAGTGCAGTTTTGTTACATGGATAGATTGCC
TAGTGGTGAAGTCTGGGCTTTTAGTGTAAACCATCACCTAATAATATACGTTGTACCCATTAAAGTTATTTCTCAT
CCCTCACCCCCCTCCACCTTGTACCCCTTCTGAGTCTCCAATGTCTATTATTCCACACTCCATGTCCACGTGTAC
ACATTATTTAGCTCCCACTTACAAGTGAGAACATGTGGTATTTGACTTTCTGTTTTTGAAGTTATTTCACTTAAAA
TAATGACCTCCAGTTTCATCCATGTTGCTGCAAAAGACATGATCTCGTTCCTTTTTTATGGCAGTGTAGTATTCCA
TTCCATATACATATATAAACGTTATATATATGTAACGTTTCTTTATCCAATCATCTGTTGATGGATAGATTCCA
TATCTTTGCTACTGTAAACAGAGCTGTGATAAGCATACAAGTGCAGGTTTCTTTTTGATATACTGATTTCTTTTC
CTTTGGGTAGATACCAGTAGTAGGACTGCTGGATCAAATGGTAGCTCTATTTTTAAGACAGTATGGAGAAATCAC
CATACTGTTTTCCATAGGGGTGTACTAATTTACAGTCCCACCAACAGTGTATAGGTGTTCCCTTTTCTCTGCAT
CCTTACCAATATCTGTAATTTTTGACTTTTTAATAATAGCCATTCTCATTTGTGTGAGATAAGGTCTCATTGTG
GTTTTAATTTCCATTTCTCTGATGACTTTTGATGTTAAGCATTTTTCATATGCTTCTTAGCCACGTGTATGTAT
TCTTTTTGAAAAATGTTTATTCATGTCTTTTGCCCACTTTTAAATGGCATTATTTGGATTTTTTTGTTGAGTT
ATTTGAGTTTCTTATATATTCTGGATAATAGTCTGGATAATATAATTCTGGATAATATATAATAGTCTTATATATT
CTGGATATATTCTGGATACATGGTTTGCAAATATTTCTCCGGTCTGCACGTTGTTCAATCTGTTGATGGTTTA
TTTTGCTGTGCAGAACTTTTTTAGTTTAATTAAGTCCCATTTGTCTAAAAAAAAAAAAAAAAAAAA

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FIGURE 3003

MAETSAIPTGFGELEVLAVGMVLLVEALSGLSLNLTITIFSCKTPELRTPCHLLVLSLALADSGISLNALVAATS
SLLRVSHRRWPYGS DGCQAHGFQGFVTALASICSSAAIAWGRYHHYCTRSQLAWNSAVSLVLFVWLSSAFWAALP
LLGWGHYDYEPLGTCCTLDYSKGDRNFTSFLFTMSFFNFAMPLFITITISYSLMEQKLGKSGHLQVNTTLPARTLL
LGWGPYAILLYLYAVIADVTSISPKLQMVPAIAKMVPTINAINYALGNEMVCRGIWQCLSPQKREKDRTK

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FIGURE 3004

GGGCAACCCGCGCGGGACCCCTTCCTCCCTAGTCGCGGGGAGTCTGAGAAAGCGCGCCTGTTTCGCGACCATCACG
CACCTCCCCTCCGCTTGTGGCCATGTACCGCTACCTGGGCGAAGCGCTGTTGCTGTCCCGGGCCGGGCCCGCTGC
CCTGGGCTCGGCGTCCGCCGACTCGGCCGCGTTGCTGGGCTGGGCCCGGGGACAGCCCGCCGCCGCCCGCAGCC
GGGGCTGGCATTGGCCGCCCGCGCCACTACAGCGAGGCGGTGGCCGACC GCGAGGACGACCCCAACTTCTTCAA
GATGGTGGAGGGCTTCTTCGATCGCGCGCCAGCATCGTGAGGACAAGCTGGTGGAGGACCTGAGGACCCGGGA
GAGCGAGGAGCAGAAGCGGAACCGGTGCGCGCATCTGCGGATCATCAAGCCCTGCAACCATGTGCTGAGTCT
CTCCTTCCCCATCCGGCGCGACGACGGCTCCTGGGAGGTATCGAAGGCTACCGGGCCAGCACAGCCAGCACC
CACGCCCTGCAAGGGAGGTATCCGTTACAGCACTGATGTGAGTGTAGATGAAGTAAAAGCTTTGGCTTCTCTGAT
GACATACAAGTGTGCAGTGGTTGATGTGCCGTTTGGGGGTGCTAAAGCTGGTGTAAAGATCAATCCCAAGAACTA
TACTGATAATGAATTGGAAAAGATCACAAGGAGGTTCACCATGGAGCTAGCAAAAAGGGCTTTATTGGTCTTG
CATTGATGTGCTGCTCCAGACATGAGCACAGGTGAGCGGGAGATGTCTGGATCGCTGATACCTATGCCAGCAC
CATAGGGCACTATGATATTAATGCACACGCCTGTGTTACTGGTAAACCCATCAGCCAAGGGGGAAATCCATGGACG
CATCTCTGCTACTGGCCGTGGTGTCTTCCATGGGATTGAAAATTTTCATCAATGAAGCTTCTTACATGAGCATTTT
AGGAATGACACCAGGGTTTGGAGATAAAACATTTGTTGTTGAGGATTTGGTAATGTGGGCCTACACTCTATGAG
ATATTTACATCGTTTTTGGTGCTAAATGTATTGCTGTTGGTGAGTCTGATGGGAGTATATGGAATCCAGATGGTAT
TGACCCAAAGGAAGTGAAGACTTCAAATTGCAACATGGGTCCATTCTGGGCTTCCCCAAGGCAAAGCCCTATGA
AGGAAGCATCTTGGAGGCCGACTGTGACATACTGATCCAGCTGCCAGTGAGAAGCAGTTGACCAAATCCAACGC
ACCCAGAGTCAAAGCCAAGATCATTGCTGAAGGTGCCAATGGGCCAACAACCTCAGAAGCTGACAAGATCTTCCT
GGAGAGAAACATTATGGTTATTCCAGATCTCTACTTGAATGCTGGAGGAGTGACAGTATCTTACTTTGAGTGGCT
GAAGAATCTAAATCATGTGAGCTATGGCCGTTTGACCTTCAAATATGAAAGGGATTCTAACTACCACTTGCTCAT
GTCTGTTCAAGAGAGTTTAGAAAGAAAATTTGGAAAGCATGGTGGAATATTCCCATTTGACCCACGGCAGAGTT
CCAAGACAGGATATCGGGTGCATCTGAGAAAGACATCGTGCACTCTGGCTTGGCATAACAATGGAGCGTTCTGC
CAGGCAAATTATGCGCACAGCCATGAAGTATAACCTGGGATTGGACCTGAGAACAGCTGCCATGTTAATGCCAT
TGAGAAAGTCTTCAAAGTGTACAATGAAGCTGGTGTGACCTTCACATAGATGGATCATGGCTGACTTCCTCACTA
TCCTCTTCACATGTAACCTTCTGCAGACCTATCACAAGTTTACATGTAACCAAGAAATCCCTTTCTCTCCTGACT
CATTATAATGGATACCATTCTCAACAAGTCAATCCAAGTCAGCCCCTTAAGGAGAAAGAAATTAAGGTTAGCGG
ATCATGTACAAGCTGAGTGTGAAAGTAGAAATCACCTACACCAGAGAGCCATTTTGGTATTTTGCCTTTAAATAA
AAAGCCTCCTTTATCTGGCTGTGCAGCCTTGCTCTGTGGCTTTTCCCAACACAATCAGTGCTAGTGCTGGGGAGG
AACAGTCAAGAGCAGTCAGTTGCTTGCTTATTTTTCTGGATGAGTCTGGGACACACTGTAACCTTTAACACATTT
AAGAAGTAGGTGTGTGGCCTTTTCCAGAGGTGGCATGGTCTCAAGTGAGTTCTTAGTATTTTATATCAGCAAAA
TAATTCAATTTTGCAGGTTGCAACAAATATAAAACCTGTTTCTGTTTATGAATATTATCTTTTAGAATAGAAT
AAGTACATGCTGCTGTAATAAAATTGCCTTTAATCACTTAACAAGCCTAACCTTGACTCAAACAGTGAATGCCTA
TAGAAATAATAAATGAAAAAACTAGTATTTTTATATCATAAAACAATGTCAATTTATAGCTTATCATTATGTAT
TGTCCAGCAGACATTAAAAGCCCTGTGGATAATTAAGTTATCTTCATACCTGCAAAATGGTGGAGGCTATTTTCA
TAAAACCTGTGCAATTTGCTTACCATAATTATGATACAGTCCAAAGAATGCAGTCACTTTTATCATGTAACT
AATTGTTCTCTTTTGAAGATCTATGGTTGACTAATTAAACAATAATTCAAGTAGAGTGTCCAGAAAAAAACCAC
TTGGGCTCCCTGTTTGGAGTCTGGCTGGCTCTGAGCATTGCCAATGGCCCTACTCACCTGACTTTGTATCCTCT
CCTTTTAGAGGCTTTGCATTCTGCACCCAGCTTCACTAACAGTGGGCTGAAAACATCCTTGGGTTGAGTGTTC
TTTGGGAGTTATTTGGCCAGGGCCTTTTGAACAGTAGTGTCCCATGAAGTGCTAGATAATATATGTGTAAGAGT
CAGCTTTTTTTTTTTTTTAACTCTAACACCCCTTCAGAAATTTCTAACTACTTTGTAAGTGCATGGCTTAACCT
GGTGATAAAAGCAGTTATTAAAAGTCTACGTTTTCCAAAAA

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FIGURE 3005

MYRYLGEALLLSRAGPAALGSASADSAALLGWARGQPAAAPQPGLALAARRHYSEAVADREDDPNFFKMVEGFFD
RGASIVEDKLVEDLRTRESEEQKRNRVRGILRIKPCNHVLSLSFPIRRDDGSWEVIEGYRAQHSQHRTPCGGI
RYSTDVSVDEVKALASLMTYKCAVVDVPFGGAKAGVKINPKNYTDNELEKITRRFTMELAKKGFIGPGIDVPAPD
MSTGEREMSWIADTYASTIGHYDINAHACVTGKPISQGGIHGRISATGRGVFHGIENFINEASYMSILGMTPGFG
DKTFVVQGFQGNVGLHSMRYLHRFGAKCIAVGESDGSIWNPDGIDPKELEDFKLQHGSILGFPKAKPYEGSILEAD
CDILIPAASEKQLTKSNAPRVKAKIIAEGANGPTTPEADKIFLERNIMVIPDLYLNAGGVTVSYFEWLKNLNHVS
YGRITFKYERDSNYHLLMSVQESLERKFGKHGGTIPVPTAEFQDRISGASEKDIVHSGLAYTMERSARQIMRTA
MKYNLGLDLRTAAYVNAIEKVFKVYNEAGVTFT

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FIGURE 3006

ATGGGGGAGAATATCATTGTAGAAAATGGAAACAGTGTGGATCAAGGTAGAGTGGATCTCGTGCAGGGTCCCCTT
GGTGAACAGTGGCCATGTCCGCAACACTGGGTGCATTGGGACAGCACCAGGTATGAACCTCATCATAGCAGCCAT
CACAAGGACAAGGCCATTAAGAAATTCGTCATTCAAAACATAGTGGAGGCCACAGCAGTCAGGGACATTTCTGAA
GCGAGCGTCTTTGATGCCTATGTGCGTCCCAAGCTGTATGTGAAGCTACATTACTGTGTCTTCACTTCTGCTGTG
TCTACGCTTCTCTTCTTTACCTTAA

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FIGURE 3007

MGENIIVENGNSVDQGRVDLVQGGLGEQWPCPQHVVHWDSTRYEPHSSHHKDKAIKKFVIQNIVEATAVRDISE
ASVFDAYVRPKLYVKLHYCVFTSAVSTLLFFT

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FIGURE 3008

GCAGCCCAGCCAAGCACTGTCAGGAATCCTGTGAAGCAGCTCCAGCTATGTGTGAAGAAGAGGACAGCACTGCCT
TGGTGTGTGACAATGGCTCTGGGCTCTGTAAGGCCGGCTTTGCTGGGGACGATGCTCCCAGGGCTGTTTTCCCAT
CCATTGTGGGACGTCCAGACATCAGGGGGTGATGGTGGGAATGGGACAAAAAGACAGCTACGTGGGTGACGAAG
CACAGAGCAAAAAGAGGAATCCTGACCCTGAAGTACCCGATAGAACATGGCATCATCACCACCTGGGACGACATGG
AAAAAGATCTGGCACCACCTCTTTCTACAATGAGCTTCGTGTTGCCCTGAAGAGCATCCCACCCTGCTCACGGAGG
CACCCCTGAACCCCAAGGCCAACCGGGAGAAAATGACTCAAATTATGTTTGAGACTTTCAATGTCCCAGCCATGT
ATGTGGCTATCCAGGCGGTGCTGTCTCTCTATGCCTCTGGACGCACAACCTGGCATCGTGCTGGACTCTGGAGATG
GTGTCACCCACAATGTCCCCATCTATGAGGGCTATGCCTTGCCCCATGCCATCATGCGTCTGGATCTGGCTGGCC
GAGATCTCACTGACTACCTCATGAAGATCCTGACTGAGCGTGGCTATTCTTCGTTACTACTGCTGAGCGTGAGA
TTGTCCGGGACATCAAGGAGAACTGTGTTATGTAGCTCTGGACTTTGAAAATGAGATGGCCACTGCCGCATCCT
CATCCTCCCTTGAGAAGAGTTACGAGTTGCCTGATGGGCAAGTGATCACCATCGGAAATGAACGTTTCCGCTGCC
CAGAGACCCTGTTCCAGCCATCCTTCATCGGGATGGAGTCTGCTGGCATCCATGAAACCACCTACAACAGCATCA
TGAAAGTGTGATATTGACATCAGGAAGGACCTCTATGCTAACAATGTCTTATCAGGGGGCACCCTATGTACCCTG
GCATTGCCGACCGAATGCAGAAGGAGATCACGGCCCTAGCACCCAGCACCATGAAGATCAAGATCATTGCCCTC
CGGAGCGCAAATACTCTGTCTGGATCGGTGGCTCCATCCTGGCCTCTCTGTCCACCTTCAGCAGATGTGGATCA
GCAAACAGGAATACGATGAAGCCGGGCCTTCCATTGTCCACCGCAAATGCTTCTAAAAÇACTTTCTGCTCCTCT
CTGTCTCTAGCACACAACCTGTGAATGTCCTGTGGAATTATGCCTTCAGTTCTTTTCCAATCATTCTAGCCAAA
GCTCTGACTCGTTACCTATGTGTTTTTAATAAATCTGAAATAGGCTACTGGTAA

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FIGURE 3009

MCEEEDSTALVCDNGSGLCKAGFAGDDAPRAVFPSIVGRPRHQGVVMGMGQKDSYVGDEAQSKRGILTLKYPIEH
GIITNWDDMEKIWHHSFYNELRVAPEEHPTLLTEAPLNPKANREKMTQIMFETFNVPAMYVAIQAVLSLYASGRT
TGIVLDSGDGVTHNVP IYEGYALPHAIMRLDLAGRDLTDYLMKILTERGYSFVTTAEREIVRDIKEKLCYVALDF
ENEMATAASSSSLEKSYELPDGQVITIGNERFRCPETLFQPSFIGMESAGIHETTYNSIMKCDIDIRKDLYANNV
LSGGTTMYPGIADRMQKEITALAPSTMKIKI IAPPERKYSVWIGGSILASLSTFQQMWISKQEYDEAGPSIVHRK
CF

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FIGURE 3010

ACTTTCCTTTTGTAACTGCTGAGCTGAAGGGAAACAAACAAAAGGAACAGAGGCCACTTGTATATATAGGTCTC
TTCAGCATTATTGTTGGCAGAAAGAGGAAGATTTCTGAAGAGTGCAGCTGCCTGAACCGAGCCCTGCCGAACAGC
TGAGAATTGCACTGCAACCATGAGTGAGAACAATAAGAATTCCTTGGAGAGCAGCCTACGGCAACTAAAATGCCA
TTTCACCTGGAACCTTGATGGAGGGAGAAAACCTCCTTGGATGATTTTGAAGACAAAGTATTTTACCGGACTGAGTT
TCAGAATCGTGAATTCAAAGCCACAATGTGCAACCTACTGGCCTATCTAAAGCACCTCAAAGGGCAAAACGAGGC
AGCCCTGGAATGCTTACGTAAAGCTGAAGAGTTAATCCAGCAAGAGCATGCTGACCAGGCAGAAATCAGAAGTCT
GGTCACCTGGGGAACTATGCCTGGGTCTACTATCACATGGGCCGACTCTCAGACGTTTACAGATTTATGTAGACAA
GGTGAACATGTCTGTGAGAAGTTTCCAGTCCCTATAGAATTGAGAGTCCAGAGCTTGACTGTGAGGAAGGGTG
GACACGGTTAAAGTGTGGAGGAAACCAAAATGAAAGAGCGAAGGTGTGCTTTGAGAAGGCTCTGGAAAAGAAGCC
AAAGAACCCAGAATTCACCTCTGGACTGGCAATAGCAAGCTACCGTCTGGACAACCTGGCCACCATCTCAGAACGC
CATTGACCCCTCTGAGGCAAGCCATTCCGGCTGAATCCTGACAACCAAGTACCTTAAAGTCTCCTGGCTCTGAAGCT
TCATAAGATGCGTGAAGAAGGTGAAGAGGAAGGTGAAGGAGAGAAGTTAGTTGAAGAAGCCTTGGAGAAAGCCCC
AGGTGTAACAGATGTTCTTCGCAGTGCAGCCAAGTTTATCGAAGAAAAGATGAGCCAGACAAAGCGATTGAACT
GCTTAAAAGGCTTTAGAATACATAACCAACAATGCCTACCTGCATTGCCAAATTGGGTGCTGCTATAGGGCAAA
AGTCTTCCAAGTAATGAATCTAAGAGAGAATGGAATGTATGGGAAAAGAAAGTTACTGGAACATAATAGGACACGC
TGTGGCTCATCTGAAGAAAGCTGATGAGGCCAATGATAATCTCTTCCGTGTCTGTTCCATTCTTGCCAGCCTCCA
TGCTCTAGCAGATCAGTATGAAGACGCAGAGTATTACTTCCAAAAGGAATTCAGTAAAGAGCTTACTCCTGTAGC
GAAACAACCTGCTCCATCTGCGGTATGGCAACTTTCAGCTGTACCAATGAAGTGTGAAGACAAGGCCATCCACCA
CTTTATAGAGGGTGTAATAATAACCAGAAATCAAGGGAGAAAGAAAAGATGAAAGACAAACTGCAAAAAATTGC
CAAAATGCGACTTTCTAAAATGGAGCAGATTCTGAGGCTTTCATGTCTTGGCATTCCCTTCAGGAGCTGAATGA
AAAAATGCAACAAGCAGATGAAGACTCTGAGAGGGGTTTGGAGTCTGGAAGCCTCATCCCTTCAGCATCAAGCTG
GAATGGGGAATGAAGAATAGAGATGTGGTGGCCACTAGGCTACTGCTGAAAGGGAGCTGAAATTCCTCCACCAAG
TTGGTATTCAAAATATGTAATGACTGGTATGGCAAAAGATTGGACTAAGACACTGGCCATACCACTGGACAGGGT
TATGTTAACACCTGAATTGCTGGGTCTTGAGAGAGCCCAAGGAGTTCTGGGAGAGGGACCAGATTGGGGGGTAGG
TCCACGGGCTTGGTGATAGAATTATTTCTCGATTGACTTCTTGAGTGCAATTTGAACTGTAACATTTGCTTAGTC
ACCTTTAGTGGAGTAATCTACTGGGCTTGTTTCTATATTTATATAAAGCAGCCAAATCCTTCATGTAATATTGAA
GTCCATTTTTGCAATGTTGTTCCATACTTGGAGTCATTTTGCATCCCATAGAGGTTAGTCCTGCATAGCCAGTAA
TGTGCTAAGTTTATCCAAAAGCTGGCGGACCAGTCTAAATAGGGCTCAGTATCCCCCATCGCTTATCTCTGCC
TCCTTCCTCCTCCTTCCCAGTCTATCATCAACCTTGAGTATTTACACAATGTGAATTCAAGTGCCTGATTAATT
GAGGTGGCAACATAGTTTGGAGCAGGGCAGAGAACAGGAAGATACATAGCTAGAAGCGACGGGTACAAAAGCA
ATGTGTACAAGAAGACTTTTACGCAAGTATACAGAGAGTTCACCTCTACTCTGCCCTCCTCATAGTCATAATGTAG
CAAGTAAAGAATGAGAATGGATTCTGTACAATACACTAGAAACCAACATAATGTATTTCTTTAAACCTGTGTGA
AAAAA

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FIGURE 3011

MSENNKNSLESSLRQLKCHFTWNLMEGENSLDDFEDKVFYRTEFQNREFKATMCNLLAYLKHLKGQNEAALECLR
KAEELIQQEHADQAEIRSLVTWGNIAWVYYHMGRLSDVQIYVDKVKHVCEKFSSPYRIESPELDCEEGWTRLKCG
GNQNERAKVCFEKALEKKPKNPEFTSGLAIASYRLDNWPPSQNAIDPLRQAIRLNPONQYLKVLLALKLHKMREE
GEEEGEGEKLVEEALEKAPGVTDLRSAAKFYRRKDEPDKAIELLKKALEYIPNNAYLHCQIGCCYRAKVFQVMN
LRENGMYGKRKLELIGHAVHLKKADEANDNLFVCSILASLHALADQYEDAEYFQKEFSKELTPVAKQLLHL
RYGNFQLYQMKCEDKAIHHFIEGVKINQKSREKEKMKDKLQKIAKMRLSKNGADSEALHVLAFQLNELNEKMQQAD
EDSERGLESGLIPSASSWNGE

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FIGURE 3012

CTCCCGGACGTAGGTAGTTTGTGGGCCGGGTTCTGAGGCCTTGCTTCTCTTTACTTTTCCACTCTAGGCCACGA
TGCCGCAGTACCAGACCTGGGAGGAGTTTCAGCCGCGCTGCCGAGAAGCTTTACCTCGCTGACCCTATGAAGGCAC
GTGTGGTTCTCAAATATAGGCATTCTGATGGGAACCTGTGTGTTAAAGTAACAGATGATTTAGTTTGTGGTGT
ATAAAACAGACCAAGCTCAAGATGTAAAGAAGATTGAGAAATTCACAGTCAACTAATGCGACTTATGGTAGCCA
AGGAAGCCCCGAATGTATTTTGGAGCATAAAATGTATGCTGTTGTGACCAATAAATATAAAATATGGTAATTGGA
ATTAACCCACACCATAGTATGCATTGTTATACATACTGTGTACCTAATTATGTATAGCAGTGTAGTCTCAATTA
TATCTAAAAGTAATTGTGACTAACAAGTATGCTTTGCCTTATTTCCACATTTAAAGTACCTGTTAATATAAGGGA
TTTGTAGTATCAGCTTGTTGAGCAATGACTTTGAATCTAGTTTTCAGTGATCAGAAGCAGCATTATTTGAGTGT
ATGAATGGAATGATGATCACTGTGCTATAATGTACTGAAACCACCATATTACAGAAATATTTACTACATATTTT
CATCTGTAGTTTCTCAGAAGGGCTATGGATTAGTTTGAAGTGTCAAATCCTTGCATACTTCTGTGACACCCCTGC
CCATTTTCTGTCTTTAATTAACCAAGGTGTTAGGTGTTACTGTCACAACTGTTATGTTTTCCAGTAAACTAGAAG
TACGATATTTGATAATTATATTTGTATCCTAAATTCACCACCTAAATGTAATGTTGATTCTCAAGAATGAAAT
GAAGGCACTACATTGAAATATGTTTGTATAAATTTGTCATGTTGAACAACATTTTA

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FIGURE 3013A

CTTCTCTCCCAGGGCGGTGCGACCCGGAGCTCCAGCGCCCCGAGTCTCCACTTCGTTTGCTGAAACTTGCTTTCTA
CCAGCTAAGAACCATGCTGCGAGTGATTGTGGAATCTGCCAGCAATATCCCTAAAACGAAATTGGCAAGCCGGA
TCCTATTGTTTCTGTCAATTTTAAAGGATGAGAAAAAGAAAACAAAGAAAGTTGATAATGAATTGAACCTGTCTG
GAATGAGATTTTGGAGTTTGAATTTGAGGGGTATACCACTGGACTTTTCATCTTCCCTTGGGATTATTGTGAAAGA
TTTTGAGACAATTGGACAAAATAAATTAATTGGCAGCGGCGACTGTAGCCCTGAAGGACCTGACTGGTGACCAGAG
CAGATCCCTGCCGTACAAGCTGATCTCCCTGCTAAATGAAAAAGGGCAAGATACTGGGGCCACCATTGACTTGGT
GATCGGCTATGATCCGCTTCTGCTCCACATCCAATGACCTGAGCGGGCCAGCGTGCCAGGCATGGGAGGAGA
TGGGGAAGAAGATGAAGGTGATGAAGACAGGTTGGACAATGCAGTCAGGGGCCCTGGGCCAAGGGGCCAGTTGG
GACGGTGTGCGAAGCTCAGCTTGCTCGGAGGCTCACCAAGTAAAGAACAGCCGGCGGATGCTGTCAAATAAGCC
ACAGGACTTCCAGATCCGCGTCCGAGTGATTGAGGGCCGACAGTTAAGTGTTAACAACATAAGGCCTGTGGTCAA
AGTTCACGTCTGTGGCCAGACACACCGAACAAGAATCAAGAGAGGAAACAACCCCTTTTTTGTAGAGTTGTTTTT
CTACAATGTCAACATGACCCCTTCTGAATTGATGGATGAGATCATCAGCATCCGGGTTTATAATTCTCACTCTCT
GCGGGCAGATTGTCTGATGGGGGAATTTAAGATTGATGTTGGATTGTTTATGATGAACCTGGCCATGCTGTCA
GAGAAAGTGGCTTCTTCTCAATGACCCGGAAGATACCAGTTCAGGTTCTAAAGGTTATATGAAAGTCAGCATGTT
TGTCTTGGGAACCGGAGATGAGCCTCCTCTGAGAGACGAGATCGTGATAATGACAGTGATGATGTGGAGAGTAA
TTTGTTACTCCCTGCTGGCATTGCCCTCCGGTGGGTGACCTTCTGTGAAAAATCTACCGAGCTGAGGACATCCC
CCAGATGGATGATGCCCTTCTCACAGACAGTAAAGGAAATATTTGGAGGCAATGCAGATAAGAAAAATCTCGTGGA
TCCTTTTGTAGAAGTTTCCTTTGCTGGAAAAAGGTTTGTACAAACATAATTGAGAAAAATGCAAACCCAGAGTG
GAATCAGGTGCTCAATCTTCAGATCAAGTTTCCTTCAGTGTGTGAAAAATAAACTAACAATATATGACTGGGA
CCGTCTTACTAAAAATGATGTAGTTGGAACAACATATCTACACCTCTCTAAATTTGCTGCCTCTGGTGGGGAGT
GGAAGATTTCTCATCTTCGGGAAC TGCGGCTGCATCATAACAGTAAACACAGGAGAAACAGAGGTAGGCTTTGT
TCCAACGTTTGGACCTTGTTACCTGAATCTTTATGGAAGCCCCAGGGAGTACACGGGATTCCCAGACCCCTATGA
TGAGCTGAATACTGGAAGGGGGGAAGGAGTTGCCACAGAGGCAGGATCTTGGTTGAATTAGCCACTTTTCTTGA
GAAGACACCACCAGATAAAAAAGCTTGAGCCCATTTCAAAATGATGACCTGCTGGTTGTTGAGAAATACCAGCGAAG
GCGGAAGTACAGCCTGTCTGCCGTGTTTCATTACGCCACCATGTTGCAAGATGTTGGTGAGGCCATTTCAGTTTGA
AGTCAGCATTTGGGAACATATGGCAACAAGTTTGACACCACCTGTAAGCCTTTGGCATCAACAACCTCAGTACAGCCG
TGCTGTATTTGATGGCAACTACTATTACTTGCCTTGGGCCCCACACCAAGCCAGTTGTTACCCTGACTTCATA
CTGGGAGGATATTAGTCATCGCCTGGATGCGGTGAACACTCTCCTAGCTATGGCAGAACGGCTGCAAAACAAATAT
AGAAGCTCTAAATCAGGGATACAAGGTAAATTTCTGCAAAACCAGCTGGCTGAATTGTGGCTGAAGCTGATAGA
TGAAGTTATAGAAGACACGAGATACACGTTGCCCTCTACAGAAGGAAAAGCCAACGTACAGTTCTCGATACTCA
GATCCGAAAGCTGCGGTCCAGGTCTCTCTCCCAATACATGAGGCGGCTGTGAGGATGAGGTGCGGAAGCCACAGA
TGTGAAGTCCACACTGGCAGAAATTTAGGACTGGCTTGATAAATTAATGCAGCTGACTGAAGAGCCACAGAACAG
CATGCCCTGACATCATCATCTGGATGATCCGGGGAGAGAAGAGACTGGCCTATGCACGAATTCGCCGACATCAGGT
CTTGTAATCCACAGTGGTGAGAATGCATCTGGAAAATACTGTGGGAAAACCCAAACCATCTTTCTGAAGTATCC
ACAGGAGAAAAACAACGGGCCAAAGGTGCCCTGTGGAGTTGCGAGTGAACATCTGGCTAGGCTTAAGTGCTGTGGA
GAAGAAGTTTAACAGCTTCGCAGAAGGAACCTTACCGCTCTTTGCTGAAATGTATGAAAATCAAGCTCTCATGTT
TGGAATTTTCTGCCTCCAAAAGGCTGGGAATGGGAAGGAGAGTGGATAGTTGATCCTGAAAGAAGCTTGCTGAC
TGAGGCAGATGCAGGTACACGGAGTTCATGATGAAGTCTATCAGAACGAGAGCCGCTACCCCGGGGGCGACTG
GAAGCCGGCCGAGGACCTACACGGATGCGAACGGCGATAAAGCAGCATCACCCAGCGAGTTGACTTGTCTCC
AGGTTGGGAATGGGAAGATGATGATGCTTATGACATAAATCGAGCGGTGGATGAGAAAGGCTGGGAATATGG
AATCACCATTCTCTGATCATATAAGCCCAATCTGGGTTGACAGAGAGAAAATGTACCACACTCATAGACGGCG
AAGGCTGGTCCGAAAACGCAAGAAAGATTTAACACAGACTGCTTCAAGCACCGCAAGGGCCATGGAGGAATTGCA
AGACCAAGAGGGCTGGGAATATGCTTCTCTAATTGGCTGGAAATTTCACTGGAAACAACGTAGTTTCAGATACCTT
CCGCCGACAGCTGGAGGAGAAAAATGGCTCCTTCAGAAACACATGGTGCAGCTGCCATCTTTAACTTGAAGG
TGCCCTTGGGGCAGACACTACCGAAGATGGGGATGAGAAGAGCCTGGAGAAACAGAAGCACAGTCCCACTGT
GTTCCGAGCAAAACACCCCATTTGTTTCTGCAATTTTGCAGAGTCTACATCTACCATCTGCGTGTATGTCTA
TCAAGCCAGAAACCTCTTGGCTTTAGATAAGGATAGCTTTTCAGATCCATATGCTCATATCTGTTTCTCCATCG

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FIGURE 3013B

GAGCAAAACCACTGAGATCATCCATTCAACCCTGAATCCCACGTGGGACCAAACAATTATATTCGATGAAGTTGA
AATCTATGGGGAACCCCAAACAGTTCTACAGAATCCACCCAAAGTTATCATGGAACTTTTTGACAATGACCAAGT
GGGCAAAGATGAATTTTTAGGACGAAGCATTCTCTCTCTGTGGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGT
CAAACCTTCTCTGGCACCCAGTAATGAATGGAGACAAAGCCTGCGGGGATGTTCTTGTAAGTGCAGAGCTGATTCT
GAGGGCAAGGATGGCTCCAACCTTCCATTCTTCCCCCTCAAAGGGCGCCAAATCTATACATGGTCCCCCAGGG
GATCAGGCCTGTGGTCCAGCTCACTGCCATTGAGATTCTAGCTTGGGGCTTAAGAAATATGAAAACTTCCAGAT
GGCTTCTATCACATCCCCCAGTCTTGTGTGGAGTGTGGAGGAGAAAGGTGGAATCGGTGGTGATCAAAAACCT
TAAGAAGACACCCAACTTTCCAAGTTCTGTTCTCTTCATGAAAGTGTCTTGCCCAAGGAGGAATTGTACATGCC
CCCACTGGTGATCAAGGTTCATCGACCACAGGCAGTTTGGGCGGAAGCCTGTCTGTCGGCCAGTGCACCATCGAGCG
CCTGGACCGCTTTCGCTGTGACCTTATGCAGGGAAAGAGGACATCGTCCCACAGCTCAAAGCCTCCCTTCTGTC
TGCCCCACCATGCCGGGACATCGTTATCGAAATGGAAGACACCAAACCACTTACTGGCTTCTAAGCTGACAGAAAA
GGAGGAAGAAATCGTGGACTGGTGGAGTAAATTTTATGCTTCTCAGGGGAACATGAAAAATGCGGACAGTATAT
TCAGAAAGGCTATTCCAAGCTCAAGATATATAATTGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGT
CTTCTCAGATACGTTCAAGTTGTACCGAGGCAAGTGGATGAAAAATGAAGATCCTTCTGTGGTTGGAGAGTTTAA
GGGCTCCTTTTCGGATCTACCCTCTGCCGATGACCCAGCGTGCCAGCCCCCTCCAGACAGTTTCGGGAATTACC
TGACAGCGTCCCACAGGAATGCACGGTTAGGATTTACATTGTTTCGAGGCTTAGAGCTCCAGCCCCAGGACAACAA
TGGCCTGTGTGACCTTACATAAAAAATAACACTGGGCAAAAAAGTCATTGAAGACCGAGATCACTACATTCCCAA
CACTCTCAACCCAGTCTTTGGCAGGATGTACGAACTGAGCTGCTACTTACCTCAAGAAAAAGACCTGAAAAATTC
TGTCTATGATTATGACACCTTTACCCGGGATGAAAAAGTAGGAGAAACAATTATTGATCTGGAAAAACCGATTCTT
TTCCCGCTTTGGGTCCCCTGCGGCATACCAGAGGAGTACTGTGTTTCTGGAGTCAATACCTGGCGAGATCAACT
GAGACCAACACAGCTGCTTCAAAATGTGCGCCAGATTCAAAGGCTTCCCACAACCCATCCTTTCCGAAGATGGGAG
TAGAATCAGATATGGAGGACGAGACTACAGCTTGGATGAATTTGAAGCCAACAAAAATCCTGCACCAGCACCTCGG
GGCCCTGAAGAGCGGCTTGCTCTTACATCCTCAGGACTCAGGGGCTGGTCCCTGAGCACGTGGAAACAAGGAC
TTTGACAGCACCTTCCAGCCCAACATTTCCCAGGGAAAACTTCAGATGTGGGTGGATGTTTTCCCAAGAGTTT
GGGGCCACCAGGCCCTCCTTTCAACATCACACCCCGGAAAGCCAAGAAATACTACCTGCGTGTGATCATCTGGAA
CACCAAGGACGTTATCTTGGACGAGAAAAGCATCACAGGAGAGGAAATGAGTGACATCTACGTCAAAGGCTGGAT
TCCTGGCAATGAAGAAAACAAACAGAAAACAGATGTCCATTACAGATCTTTGGATGGTGAAGGGAATTTTAACTG
GCGATTTGTTTTCCCGTTTGACTACCTTCCAGCCGAACAACTCTGTATCGTTGCGAAAAAGAGCATTCTCTGGAG
TATTGACCAACGGAATTTGCAATCCCACCCAGGCTGATCATTGAGATATGGGACAATGACAAGTTTTCTCTGGA
TGACTACTTGGGTTTCCTAGAAGTTGACTTGCGTCACACGATCATTCTGCAAAATCACCAAGAGAAATGCAGGTT
GGACATGATTCCGGACCTCAAAGCCATGAACCCCTTAAAGCCAAGACAGCCTCCCTCTTTGAGCAGAAGTCCAT
GAAAGGATGGTGGCCATGCTACGCAGAGAAAGATGGCGCCCGCGTAATGGCTGGGAAAGTGGAGATGACATTGGA
AATCCTCAACGAGAAGGAGGCCGACGAGAGGCCAGCCGGGAAGGGGCGGACGAACCCAACATGAACCCCAAGCT
GGACTTACCAATCGACCAGAAACCTCCTTCTCTGGTTACCAACCCATGCAAGACCATGAAGTTTCATCGTGTG
GCGCCGCTTTAAGTGGGTATCATCGGCTTGCTGTCTCTGCTTATCCTGCTGCTCTTCGTGGCCGTGCTCCTCTA
CTCTTTGCCGAATATTTGTCAATGAAGATTGTAAAGCCAAATGTGTAACAAAGGCAAGGCTTCATTTCAAGAG
TCATCCAGCAATGAGAGAATCCTGCCTCTGTAGACCAACATCCAGTGTGATTTTGTGCTGAGACCACACCCAG
TAGCAGGTTACGCCATGTACCGAGCCCCATTGATTTCCAGAGGGTCTTAGTCTGGAAAGTCAGGCCAACAAGC
AACGTTTGCATCATGTTATCTCTTAAGTATTAAGTATTTATTTTCTAAAGTTTAAATCATGTTTTTCAAAATAT
TTTTCAAGGTGGCTGGTTCCATTTAAAAATCATCTTTTTATATGTGCTTTCGGTTCTAGACTTCAGCTTTTGGAA
ATTGCTAAATAGAATTCAAAATCTCTGCATCCTGAGGTGATACTTCATATTTGTAATCACTGAAAGAGCTG
TGCATTATAAAATCAGTTAGAATAGTTAGAACAATCTTATTTATGCCACAACCAATGCTATATTTTGTATGGA
TGTATAAAAGTCTATTTAACCTCTGTAATGAAACTAAATAAAATGTTTCACCTTTAAAAAAAAAAAAAAAAAAAA
AAAA

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FIGURE 3014

MLRVIVESASNIPKTKFGKPDPIVSVIFKDEKKTKKVDNELNPVWNEILEFDLRGIPLDFSSSLGIIVKDFETI
GQNKLI GTATVALKDLTGDQSRSLPYKLI SLLNEKGQDTGATIDLVI GYDPPSAPHPNDLSGSPVGMGGDGEED
EGDEDRLDNAVRGPGPKGPVGTVSEAQLARRLT KVKNRRMLSNKPQDFQIRVRVIEGRQLSGNNIRPVVKVHVC
GQTHRTRIKRGNNPFFDELFFYNVNMTPELMDIISIRVYNHSLRADCLMGFEKIDVGVFVYDEPGHAVMRKWL
LLNDPEDTSSGSGKGYMKVSMFVLGTGDEPPPERDRDNDSDVESNLLLPAGIALRWVTFLLKIYRAEDIPQMDD
AFSQTVKEIFGGNADKKNLVDPFVEVSFAGKKVCTNII EKANPEWNQVNLQIKFPSVCEKIKLTIYDWDRLTK
NDVVGTTYLHLSKIAASGGEVEDFSSSGTGAASYTVNTGETEVGFVPTFGPCYLNLYGSPREYTGFPDPYDELNT
GKGEGVAYRGRILVELATFLEKTPPDKKLEPISNDDL LVVEKYQRRRKYSLSAVFHSATMLQDVGEAIQFEV SIG
NYGNKFDTTCKPLASTTQYSRAVFDGNYYYLPWAHTKPVVTLTSYWEDISHRLDAVNTLLAMAERLQTNIEALK
SGIQGKIPANQLAELWLKLIDEVIEDTRYTLPLTEGKANVTVLDTQIRKLRSRSLSQIHEAAVRMRSEATDVKST
LAEIEDWLDKLMQLTEEPQNSMPDIIWMIRGEKRLAYARIPAHQVLYSTSGENASGKYCGKTQTIFLKYPQEK
NGPKVPVELRVNIWLGLSAVEKKFNSFAEGTFTVFAEMYENQALMF GKWGTSGLVGRHKFSDVTGKIKLKREFFL
PPKGWEWEGEWIVDPERSLLTEADAGHTEFTDEVYQNESRYPGGDWKPAEDTYTDANGDKAASPSELTCPPGWEW
EDDAWSYDINRAVDEKGEYGITIPPDHKPKSWVAAEKMYHTRRRRLVRKRKKDLTQTASSTARAMEELQDQEG
WEYASLIGWKFWKQSSDTFRRRRWRRKMAPSETHGAAAFKLEGALGADTTEDGDEKSLEKQKHSATTTFGAN
TPIVSCNFDVYIYHLRCYVYQARNLLALDKDSFSDPYAHICFLHRSKTEIIHSTLNPTWDQTIIFDEVEIYGE
PQTVLQNPVKVIMELFDNDQVGKDEFLGRSIFSPVVKLNSEMDITPKLLWHPVMNGDKACGDVLVTAELILRGKD
GSNLPILPPQRAPNLYMVPQGIRPVVQLTAIEILAWGLRNMKNFQMASITSPSLVVECGGERVESVVIKNLKKTP
NFPSSVLFMKVFLPKEELYMPPLVIKVIDHRQFGRKPVVGQCTIERLDRFRCDPYAGKEDIVPQLKASLLSAPPC
RDIVIEMEDTKPLLASKLTEKEEEIVDWWSKFYASSGEHEKCGQYIQKGYSKLKIYNCELENVAEFEGLTDFSDT
FKLYRGKSDENEDPSVVGFEKGSFRIYPLPDDPSVPAPPRQFRELPSVFPQECTVRIYIVRGLELQPDNNGLCD
PYIKITLGKKVIEDRDHYIPNTLNPVFGMYELSCYLPQEKDLKISVYDYDTFTRDEKVGETIIDLENRFLSRFG
SHCGIPEEYCVSGVNTWRDQLRPTQLLQNVAREFKGFPQPI LSEDGSRIRYGGRDYSLDEFEANKILHQHLGAPEE
RLALHILRTQGLVPEHVETRTLHSTFQPNISQKQLQMWVDVFPKSLGPPGPPFNITPRKAKKYLRVIIWNTKDV
ILDEKSITGEEMSDIYVKGWIPGNEENKQKTDVHYRSLDGEENFNWRFVFPFDYLPAEQLCIVAKKEHFWSIDQT
EFRIPPRLI IQIWDNDKFSLDDYLGFLDLRHTIIPAKSPEKCRDLMIPDLKAMNPLKAKTASLFEQKSMKGWW
PCYAEKDGARVMAGKVEMTLEILNEKEADERPAGKGRDEPNMNPKLDLPNRPETSFLWFTNPFCKTMKFIWRRFK
WVIIGLLFLLILLFFVAVLLYSLPNYLSMKIVKPNV

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FIGURE 3015

GTGTGGACAACAGTGAGTATATGGGGAATGGAGACTTCTTACCCACCCGGCTGCAGGCCAGCAGGATGCTGTCA
ACACAGTTTGTCAATCAAAGACCCGAGCAACCCTGAGAACAACGTGGGCCTTATCACACTGGATAATGACTGTG
AAGTGCTGACCACACTCACCCAGACACTGGCCGTATCCTGTCCAAGCTACATACTGTCCAACCCAAGGGCAAGA
TCACCTTCTGCATGGGCATCCACGTGGCCCATCTGGCTCTGAAGCACCGACAAGGCAACAATCACAAGATCCGCA
TCATTGCCTTTGTGGGAAACCCGGTGGAGGACAATGAGAAGAATCTGGTGAACTGGCTAAATGCCTCAAGAAGG
AGAAAGTAAATGTTGACATTATCAATTTTGGGGAAGAGGAGGTGAACACAGAAAAGCTGACAGCCTTTGTAAACA
CGTTGAATGGCAAAGATGGAACCGGTTCTCATCTGGTGACAGTGCCTCCTGGGCCAGTTTGGCTGATGCTCTCA
TCAGTTTTCCGATTTTGGCTGGTGAAGGTGGTGCCATGATGGGTCTTGGTGCCAGTGACTTTGAATTTGGAGTAG
ATCCCAGTGCTGATCCTGAGCTGGCCTTGGTCCTTCGTGTATTTATGGAAGAGCAGCGGCAGCGGCAGGAGGAGG
AGGCCCGGCAGGCAGCTGCAGCTTCTGCTGCTGAGGCCGGGATTGCTACGACTGGGACTGAAGACTCAGACGATG
CCCTGCTGAAGATGACCATCAGCCAGCAAGAGTTTGGCCACACTGGGCTTCTGACCTAAGCAGTATGACTGAGG
AAGAGAAGATTGTTTGTGCCATGCAGATGTCCCTGCAGGGAGCAGAGTTTGGCCTGGCAGAATCAGCAGACATTG
ATGCCAGCTCAGCCATGGACACATCTGAGCCAGCCAAGGAGGAGGATGATTACGACGTGATGCAAGACCCTGAGT
TCCTTCAGAGTGTCTAGAGAACCCTCCCAGGTGTGGATCCCAACAATGAAGCCATTGAAATGCTGTGGGCTCCC
TGGCCTCCCAGGCCACCAAGGACAGCAAGAAGGACAAGAAGGAGGAAGACAAGAAGTGAGACTGGAGGGAAAGGG
TAGCTGAGCCTGCTCAGGGGACTGCATGGGAAGCACGGAATATAGGGTTAGATGTGTGTTATCTGTAAATCATTAT
AGCCTAAATAAAGCTTGGCAA

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FIGURE 3016

GGGGATTTGGCTAGAAGGCTGGGCCGGCAGCGGTTGTGAGGAGTTAGCTCGCGGCATTGCAGGCTCTGAGAGGAG
GGGACCCGGTTCCCGGGTGAGTGTCCAGGCATGCCAGCGGAACGGCCCGGGCAGCGCGGCTCGGAGGCTCCA
GCAATGGTTGAACAACCTGGACACTGCTGTGATTACCCCGGCCATGCTAGAAGAGGAAGAACAGCTTGAAGCTGCT
GGACTAGAGAGAGAGCGGAAGATGCTGGAAAAGGCTCGCATGTCTTGGGATAGAGAGTCGACAGAAATTCGGTAC
CGTAGACTTCAACATTTGCTTGA AAAAAGCAATATATACTCCAAATTTTTATTGACGAAAATGGAACAGCAACAA
TTAGAGGAACAGAAGAAGAAAGAAAAATTGGAGAGAAAAAGGAGTCTTTAAAAGTTAAAAAGGTTAAAAATTCA
ATTGATGCAAGTGAAGAGAAGCCAGTTATGAGGAAAAAAGAGGAAGAGAAGATGAATCATACAATATTTTCAGAG
GTCATGTCAAAGAGGAAATTTTGTCTGTGGCTAAAAAAATAAAAAGGAGAATGAGGATGAAAACCTCCTCCTCT
ACTAATCTCTGTGTGGAAGATCTTCAGAAAAATAAAGATTGCAATAGTATAATTAAAGATAGATTGCTGAAACG
GTTAGGCAGAATACTAAATTTCTTTTTTGACCCAGTCCGGAAGTGTAAATGGTCAGCCAGTACCTTTCAACAACCA
AAGCACTTCACTGGAGGAGTGATGCGATGGTACCAAGTAGAAGGCATGGAATGGCTTAGGATGCTTTGGGAAAT
GGAATTAATGGCATTTTAGCAGATGAAATGGGATTGGGTAAGACAGTTTCAGTGCATTGCTACTATTGCATTGATG
ATTCAGAGAGGAGTACCAGGACCTTTTCTTGTCTGTGGCCCTTTGTCTACACTTCCTAAGTGGATGGCTGAATTC
AAAAGATTTACACCAGATATCCCTACAATGTTATATCATGGAACCCAGGAGGAACGTCAAAAATTGGTAAGAAAT
ATTTACAAACGGAAAGGGACTTTGCAGATTATCCTGTGGTAATCACGTCATTTGAAATAGCCATGAGAGACCGA
AATGCGTTACAGCATTGCTATTGGAAATACTTAATAGTAGATGAAGGACACAGGATTAAGAATATGAAGTGCCGT
CTAATCAGGGAGTTAAACGATTCAATGCTGATAACAACTTCTTTTGACTGGTACTCCCTTGCAAAACAATTTA
TCAGAACTTTGGTCATTGCTAAACTTTTTGTTGCCAGATGTATTTGATGACTTGAAAAGCTTTGAGTCTTGGTTT
GACATCACTAGTCTTTCTGAAACTGCTGAAGATATTATTGCTAAAGAAAGAGAACAGAATGTATTGCATATGCTG
CACCAGATTTTAACACCTTTCTTATTGAGAAGACTGAAGTCTGATGTTGCTCTTGAAGTTCCTCCTAAACGAGAA
GTAGTCGTTTATGCTCCACTTTCAAAGAAGCAGGAGATCTTTTATACAGCCATTGTGAACCGTACAATTGCAAAC
ATGTTTGGATCCAGTGAGAAAGAAACAATTGAGTTAAGTCCTACTGGTCGACCAAAACGACGAAGTAGAAAATCA
ATAAATTACAGCAAAATAGATGATTTCCCTAATGAATTGGAAAACTGATCAGTCAAATACAGCCAGAGGTGGAC
CGAGAAAGAGCTGTTGTGGAAGTGAATATCCCTGTAGAATCTGAAGTTAATCTGAAGCTGCAGAATATAATGATG
CTACTTCGTAAATGTTGTAATCATCCATATTTGATTGAATATCCTATAGACCCTGTTACACAAGAATTTAAGATC
GATGAAGAATTGGTAACAAATTTCTGGGAAGTTCTTGATTTTGGATCGAATGCTGCCAGAACTAAAAAAGAGGT
CACAAGGTGCTGCTTTTTTACAAATGACAAGCATGTTGGACATTTTGATGGATTACTGCCATCTCAGAGATTTT
AACTTCAGCAGGCTTGATGGGTCCATGTCTTACTCAGAGAGAGAAAAAACATGCACAGCTTCAACACGGATCCA
GAGGTGTTTATCTTCTTAGTGAGTACACGAGCTGGTGGCCTGGGCATTAATCTGACTGCAGCAGATACAGTTATC
ATTTATGATAGTGATTGGAACCCCAAGTCGGATCTTCAGGCCAGGATAGATGTCATAGAATTGGTCAGACAAAG
CCAGTTGTTGTTTATCGCCTTGTTACAGCAAATACTATCGATCAGAAAATTGTGGAAGAGCAGCTGCTAAAAGG
AACTGGAAAAGTTGATCATCCATAAAATCATTTCAAAGGTGGTCAGTCTGGATTAAATCTGTCTAAGAATTTT
TTAGATCCTAAGGAATTAATGGAATTATTAATACTAGAGATTATGAAAGGGAAATAAAAAGGATCAAGAGAGAAG
GTCATTAGTGATAAAGATCTAGAGTTGTTGTTAGATCGAAGTGATCTTATTGATCAAATGAATGCTTCAGGACCA
ATTAAAGAGAAGATGGGGATATTCAAGATATTAGAAAATCTGAAGATTCCAGTCTGAATGTTTGTGTTTAAAGT
GGAGCTCAAGAATAGCTTTTAAAGTTCTTATTTACATCTAGTGATTTCCCTGTATTGGGTTTGAAATACTGATT
GTCCACTTCACCTTTTTTATTATATCAGTTGACATGTAAGTACTAGTACCATGCGTACTTAAATAGATGGTAATTTT
TGAGCCTTACCAAGAACAAAGAAGTATCCATATTAAGTTTAGATTTTCAGTTAATTTTTGAGACTGAGTAGTATT
CTTGGATACAGGCTGATGTGTAAGTCTTAACTTCCAGATTTATACAGTCTTCTGTGGAAGTTTAGTAAATGTCT
TTTTCCCTCCTTTCTTCTAGTAATGCAGTTTCATGGGCTTTAGGTACTTCAGTTATGAAGTAGGCTTTTCATGGGG
AGAGATTGGGATTATGCTCTCTGTTGTTTAAAGAACTGTTTGATTTTAGAGTCTATTTCTATGAGATAGTTTACC
AAATAAATGTTCCCTTATAAG

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FIGURE 3017

GCCCGCGCCGCGCCGCTCTTTCTCCGACAGCTGCCGGGGTGCCCTGCAAGCTGTTCCGCGCGTCCTGCCCGTCT
GTCCCCGCGGGTCGTGCCCCGCCACAGCCGCCATGACCACCCAGCAGATAGACCTCCAGGGCCCGGGCCGTG
GGGCTTCCGCTCGTGGGCGGCAAGGACTTCGAGCAGCCTCTCGCCATTTCCCGGGTCACCTCGGAAGCAAGGC
GGCTCTAGCTAATTTATGTATTGGAGATGTAATCACAGCCATTGATGGGGAAAATACTAGCAATATGACACACTT
GGAAGCTCAGAACAGAATCAAAGGCTGCACAGACAACCTGACTCTCACTGTAGCCAGATCTGAACATAAAGTCTG
GTCTCCTCTGGTGACGGAGGAAGGGAAGCGTCATCCATAAAGATGAATTTAGCCTCTGAACCCCAGGAGGTCTT
GCACATAGGAAGCGCCACAAACCGAAGTGCCATGCCCTTTACCGCCTCGCCTGCCTCCAGCACTACTGCCAGGGT
CATCACAAACAGTACAACAACCCAGCTGGCCTCTACTCTTCTGAAAATATCTCCAACCTCAACAATGCCCTGGA
GTCAAAGACTGCTGCCAGCGGGGTGGAGGCGAACAGCAGACCCTTAGACCATGCTCAGCCTCCAAGCAGCCTTGT
CATCGACAAAGAATCTGAAGTTTACAAGATGCTTCAGGAGAAACAGGAGTTGAATGAGCCCCGAAACAGTCCAC
GTCTTTCTTGGTTTTGCAGGAAATCCTGGAGTCTGAAGAAAAGGGGATCCCAACAAGCCCTCAGGATTCAGAAG
TGTTAAAGCTCCTGTCACTAAAGTGCTGCGTCGATTGGAAATGCTCAGAAGTTGCCTATGTGTGACAAATGTGG
CACTGGGATTGTTGGTGTGTTTGTGAAGCTGCGGGACCGTCACCGCCACCCTGAGTGTTATGTGTGCACTGACTG
TGGCACCAACCTGAAACAGAAGGGCCATTTCTTTGTGGAGGATCAAATCTACTGTGAGAAGCATGCCCGGGAGCG
AGTCACACCACCTGAGGGTTATGAAGTGGTCACTGTGTTCCCAAGTGAGCCAGCAGATCTGACCCTGTTCTCC
AGCAGGCCCTCTGCTGCAGCTTTTTCTCTCAGTGTTCTGGCCCTCTCCTCTCTTGAAAGTTCTCTGCTTACTTTGG
TTTTCCCTCTGCTTGTAACAACTTGAGTCCCCTCCCTGCCTTGGTTAATTGACTCACACCAGCTGTGCGATGCC
GCTTTTACAATTAAAGGAAAACCTGTTTTGTTTCACTGTACCTTGTGAGCAACACTGTGTCCCTTCGCCCCACCGT
TCTTCTCTGCTGCATTTGGACATCAGCCAAATTTGAACCCAATCAAATATAACGTGTCTGACACTGATTTTGT
TTACTCAATAAATGTATAGACTACAAAAA

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FIGURE 3018

MTTQQIDLQGGPGWGFRLVGGKDFEQPLAISRVTPGSKAALANLCIGDVITAIDGENTSNMTHLEAQNRIKGCTD
NLTLTVARSEHKVWSPLVTEEGKRHPYKMNLASEPQEV LHIGSAHNRSAMPFTASPASSTTARVITNQYNNPAGL
YSSENISNFNNALESKTAASGVEANSRPLDHAQPPSSLVIDKESEVYKMLQEKQELNEPPKQSTSFLVLQEILES
EEKGDPNKP SGFRSVKAPVTKVAASIGNAQKLPMCDKCGTGIVGVFVKLRDRHRHPECYVCTDCGTNLKQKGHFF
VEDQIYCEKHARERVTPPEGYEVVTVFPK

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FIGURE 3019

ATGGAAGATTTCGATGGACATGGACGCCGACAAAGATGATCACTTTAAGGTGGATAATGATGAAAATGAGCACCAG
TTATCCTTAAGAACGCCAACAGTTTCCCTTGGGGTCTTTGAAATAACACCACCAGTGCTTTTATGGTTGAAGTGT
GGTTCAGGGCCAGTGCATATTAGTGGACAGCATTTAGTAGCTGTGGAGGAAGATGCAGAGTCAGAAGATGAAGAG
GAGGAGGATGTGAAACTCTTAAGGATATCTGGAAAATTAAAAGGACAAGAATCCTTCAAAAAACAGGAAAAAACT
CGTAAAAACACCAAAAGGGCCTAGTTCTGTAGAAGACATTAAATCAAAAATGCAAGCAAGTATAGAAAAAGGTGGT
TCTCTTCCCAAATGGAGGAAGTCTCTTTAG

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FIGURE 3020A

ATTCTGGCTGTGACTCAGTCACTGACACTGAGCCTGAGGACGAGAAGGTTGTTTCCTACTCGAAGCAGCAGAAACC
TGCCGACGGTGACTTCACCTGGGAACCTGATGGTGGTGACGCCGGACCGCATTTCGCTGTGGGGCAGAAACCACTG
TCTATGTTATTGTGAGATGTAAGCTGGATGACAGGGTGGCGACAGAAGCAGAGTTTTCTCCTGAGGATTCTCCCT
CTGTAAGGATGGAAGCCAAGGTGGAGAATGAGTACACCATTTCAGTGAAGGCTCCCAACCTTTTCATCTGGGAACG
TTTCTCTGAAGATATATTCTGGAGACTTAGTGGTGTGTGAAACCGTTATCAGCTATTATACTGACATGGAAGAAA
TTGGGAATTTATTGTCCAATGCCGCGAATCCTGTGGAATTTCATGTGTCAGGCCTTTAAAATTGTGCCCTACAACA
CAGAGACCCTTGATAAACTGCTAACCGAATCCCTGAAGAACAAATATCCCTGCAAGCGGACTGCACCTCTTTGGAA
TCAACCAGCTGGAAGAAGAAGATATGATGACAAATCAGAGGGATGAAGAGCTGCCACCCTGTTGCATTTTGCTG
CGAAGTATGGACTGAAGAACCTCACTGCCTTGTTGCTCACCTGCCAGGAGCCCTGCAGGCGTACAGCGTGGCCA
ACAAGCATGGCCACTACCCCAACACCATCGCTGAGAAACACGGCTTCAGGGACCTGCGGCAGTTTCATCGACGAGT
ATGTGGAACGGTGGACATGCTCAAGAGTCACATTAAAGAGGAAGTATGCACGGGGAGGAGGCTGATGCTGTGT
ACGAGTCCATGGCCACCTTTCCACAGACCTGCTTATGAAATGCTCGCTCAACCCCGGCTGTGACGAGGATCTCT
ATGAGTCCATGGCTGCCTTTGTCCAGCTGCCACTGAAGACCTCTATGTTGAAATGCTTCAGGCCAGTACATCTA
ACCCAATCCCTGGAGATGGTTTTCTCTCGGGCCACTAAGGACTCTATGATCCGCAAGTTTTTAGAAGGCAACAGCA
TGGGAATGACCAATCTGGAGAGAGATCAGTGCCATCTTGGTCAGGAAGAAGATGTTTATCACACGGTGGATGACG
ATGAGGCCTTTTCTGTGGACCTGGCCAGCAGGCCCCCTGTCCAGTGCCAGACCAGAGACCACTGCTCCTGGTG
CTCACCAGCTGCCTGACAACGAACCATAACATTTTAAAGTTTTGCAAAAAAAGTCAAGAGCGGCCTGGGAATT
TCTACGTTTTCTCAGAGAGCATCAGGAAAGGGCCGCCCTGTCAGACCATGGAGGGACAGGCCCCAGTCGAGTATAT
ATGACCCTTTTGCGGGAATGAAAACGCCAGGCCAGCGGCAGCTTATCACCTCCAGGAGCAGGTGAAGCTGGGCA
TTGTCAACGTGGATGAGGCTGTGCTCCACTTCAAAGAGTGGCAGCTCAACCAGAAGAAACGATCGGAGTCCCTTC
GTTTCCAGCAGGAAAAATCTTAAACGGCTAAGAGACAGCATCACCCGAAGACAGAGAGAGAAGCAAAAAATCAGGAA
AGCAGACAGACTTGGAGATCACGGTCCCAATTCCGGCACTCACAGCACCTGCCTGCAAAAAGTGGAGTTTGGAGTCT
ATGAGAGTGGCCCCAGGAAAAGTGTCAATCCCCCTAGGACGGAGCTGAGACGAGGAGACTGGAAAAACAGACAGCA
CCTCCAGCACAGCAAGTAGCACAAGTAACCGCTCCAGCACCCGGAGCCTCCTCAGTGTGAGCAGCGGGATGGAAG
GGGACAACGAGGATAATGAAGTCCCTGAGGTTACCAGAAGTCGCAGTCCAGGCCCCCCACAAGTGGATGGGACAC
CCACCATGTCCCTCGAGAGACCCCCAGGGTGCCCTCCGAGAGCTGCCTCACAGAGGCCTCCGACCAGGGAGACCT
TCCATCCTCCTCCACCTGTTCACCCAGAGGACGCTGATTCCACCTCCTAAAACCTGCCTACTTCAGGACTTTAA
GACTCACAGTCTTCAGCCTGTTAATGATGTCTTCATGTTGAGTTTTATAGCATGACTGTTGACCTTAAGATCCAT
TCTCATTGCTGATAATGCTGCAGCCCTGCTGGTTTTGGGCTTGCCCTCGAAGATTTTTATTAAGGCACGAAGAAGTGA
AAAATAAGGGCTTCATTACCATCACCAAGTATATCGAACCATACTTGTGTTGCCAAAAGGATGAAGACTTAA
TCGAAATACTTACCTCTAATTTGCCATATCAGAAGCCTAAAAAGAATGATCATAAATGTACTTCACCAGTGATTT
TACTGAAATGCACTTATATTAGTCTTTATGTATTTGCTAGTTTCAGCCTGATTTCTAGAAGAGGTTATAGTGTGAG
ACTGTAGTATTCAAGTAAGATAAGTGACCTAATTTTAAATAATTCTTCTACTTTTCTGTATATTACAGCAGGGT
ATTTAAGTGCTAGGGCTGGTCACACACAACCAACTGAAAAAGACTAGAGGGATTAGTACAACTCCTCTTATACA
GAAGGCAATCTGAGGTTCCACAGAACTCTGGAACCAAGACTATTCAGTTGGTTAAATAAAGAGGTTAGTCTAGA
CTGGGCCTGCTCATTCTAGGTCACCAATTTTCCATCTCCAAATAGCCAGGCCCTCTCTCCCTCAAGAAATGCC
AGATGTAGAAATTCATCAGTGCCTATTGGTCTTCCAGAATTTTCCATCTTCCGTATCTCCAGGCATGAGACTAC
CAAGTTTGTTTGTTTCTTTCCAATTTGGGAATTTATACTTCAGTATGGTTTCAACGCAGTTATGTTTCCAGAGA
ACATCTAGAAGTGGCTGGAAACCAGAAGCTGGGGATTCCAGGGACCCCACTTAGTGCTCTATTTCTTTTATAGGT
TTTATTTCTGGTCATAGAGAGAGAAAGACCTTTGACTTTTTCTTCGTTGAGGCTTCTGAGGAGGAAAAACAAACC
TAAATAGAAATACAGTCAGCCTTTCAAATCCATGGGTCTGTGTCCGTGGATTCAACCAACCTTGGATCAAAAA
TATTTGAAAAAAATCTACAAAGTTTCAAAAAGCAAACTTGAATTTGCTGCATGCCAAGAAGTATGTTGAATTC
ATGTAAATGAAGTGATGTGTAGGCATTGTATTAGATATTATAAAGAAATCTAGAAATGATTTAAAGCATAACAGGAG
GATGTGCATAGGTTATATGCAAAATACATGCTATTTTATATATAGGACTTGAGCATTGTTGGATTTTGATACTGG
GGGATCCTGGAACCAATCCCCATGGATACCAAAAGTACACTGTAGTTATCTATTTTTTACATACTATTATTAC
CACCATGCTCAGTAAGTCCATTTTTGTCATGGAATATGGAGCCTTAAAACATGTCATGAATTTGGAGTCCCTGGCA
CATAAATCTACCTTCAAATCAGAGGTCCTTAATGATGCCTAAACATACAGTAAATTAGAATCAGAAATACTTCT
TTAAAAAATATTCAAATGTGTTTGGTTTCCCATGGGATTATTCTCTATCCCACACGAATGTAAAAAATCCACAT

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FIGURE 3020B

TAATGATCCATTTAAGTATAGTTTTATTGGGTCCTTTTCTAATGATTAAAGGTTCTTTCTCAATTTTCATTCCTCA
GTCCTGCAAGTAAGGACTCATACTGAAGAGTACTGAAACAAGGACTTCTTGTCAGAAACAGCTTCTGGAATCTTG
GGTTTTGTTTTGTTTTTTGACAAAATACACTATTGGCCATGTCCATCACGAGAGTGTTTGTAGTAATTAATTAC
CTTGACAGGACCTGGCACTTAGTAGCATTCTTCAAATGTTCCCTCAGTGATCCTTTTACTCTCCTTGTCACCTTA
TTTGGGAGAAATAGGGGCACGTGAGATAAGAAGAAGAATAATTTTGATGTTGGTATGCTTGCCCTGTTACTTATA
GACAGTCTTTGTCATAGGCAAACTTGAATTTGATTTAAAATAGGGCTGGGAAAAATATTCAATAACTGTAAGCCC
CCTTTTGGATGCCAAACTTAGAATTTTGATATTCTCTGATGAACAAGCATTTAGATCGTAACATGGTAAAGCCT
ATTACCAGCCAATGTTGTTAGCATCTTTGTATGCACATCACTGTTTGCAATATATGAATATTTTGTTCATTG
TATTCTTATATAAAAAATAAGTAGAAAACATAAAATTGAAATTGCTGATGAGAAGCCTTGCTCTCGTGAATGTGATA
CACTTGAGACACGGATGGAAGTATCAGGAGTGCCAAGTCAAAGCAGCAGATCTTAAGCCCTCACTGGTTGTTT
CTTTAACATCCAAAATGGTTGGTTATATGTAAAAGAAGAAAATGAAATAATCTGGATGAAACACTGGGACTGTGT
TATCAAAGAATGTCTGTAGTGATGAGGTGAAAATTTTCATTTTCCAGAAACAGAACTGCTCATTATATAACATAAA
TATATTCAACTTCCACA

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FIGURE 3021

MVVQPDRIRCGAETTVYVIVRCKLDDRVATEAEFSPEDSPSVRMEAKVENEYTIISVKAPNLSSGNVSLKIYSGDL
VVCETVISYYTDMEEIGNLLSNAANPVEFMCQAFKIVPYNTETLDKLLTESLKNNIPASGLHLFGINQLEEDMM
TNQRDEELPTLLHFAAKYGLKNLTALLTCTPGALQAYSVANKHGHYPNTIAEKHGFRDLRQFIDEYVETVDMLKS
HIKEELMHGEEADAVYESMAHLSTDLLMKCSLNP GCDEDLYESMAAFVPAATEDLYVEMLQASTSNPIP GDGFSR
ATKDSMIRKFLEGNSMGMTNLERDQCHLGQEEDVYHTVDDDEAFSVDLASRPPVPVPRPETTAPGAHQLPDNEPY
IFKVFAEKSQERPGNFYVSSSESIRKGPPVRPWRDRPQSSIYDPFAGMKTPGQRQLITLQEQVKLGIVNVDEAVLH
FKEWQLNQKKRSESFRFQQENLKRLRDSITRRQREKQKSGKQTDLEITVPIRHSQHLPKVEFGVYESGPRKSVI
PPRTELRRGDWKTDSTSSTASSTSNRSSTRSLLSVSSGMEGDNEDNEVPEVTRSRSPGPPQVDGTPTMSLERPPR
VPPRAASQRPPPTRETFHPPPPVPPRGR

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FIGURE 3022

CGAAGATGGCGGAGGTGCAGGTCCTGGTGCTTGATGGTCGAGGCCATCTCCTGGGCGCCTGGCGGCCATCGTGG
CTAAACAGGTACTGCTGGGCCGGAAGGTGGTGGTTGTACGCTGTGAAGGCATCAACATTTCTGGCAATTTCTACA
GAAACAAGTTGAAGTACCTGGCTTTCTCCGCAAGCGGATGAACACCAACCCTTCCCGAGTCCCCTACCACTTCC
GGGCCCCCAGCCGCATCTTCTGGCGGACCGTGCGAGGTATGCTGCCCCACAAGACCAAGCGAGGCCAGGCCGCTC
TGGACCGTCTCAAGGTGTTTGACGGCATCCCACCGCCCTACGACAAGAAAAAGCGGATGGTGGTTCTTGCTGCC
TCAAGGTCGTGCGTCTGAAGCCTACAAGAAAGTTTGCCTATCTGGGGCGCCTGGCTCACGAGGTTGGCTGGAAGT
ACCAGGCAGTGACAGCCACCCTGGAGGAGAAGAGGAAAGAGAAAGCCAAGATCCACTACCGGAAGAAGAAACAGC
TCATGAGGCTACGGAAACAGGCCGAGAAGAACGTGGAGAAGAAAATTGACAAATACACAGAGGTCCTCAAGACCC
ACGGACTCCTGGTCTGAGCCCAATAAAGACTGTTAATTCCTAAAAAAAAAAAAAAAAAAAAAAAAAAGAAAAA

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FIGURE 3023

MAEVQVLVLDGRGHLLGRLAAIVAKQVLLGRKVVVVCCEGINISGNFYRNKLNylaFLRKRMNTSPSRGPYHFRA
PSRVFWRTVRGMLPHKTKRGQAALDRLKVSDGIPPPYDKKKRMVVPAAALKVVRLKPTRKFAYLGRLAHEVGWKYQ
AVTATLEEKRKEKAKIHYRKKKQLMRLRKQAEKNVEKKIDKYTEVLKTHGLLV

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GGCACGAGGACACGCTGGGTTCTGAGCGTGTTTCTACGTCCTCGGAAGGCCGCTCATTTAAAGCTCATTTCTCGCCACG
GCTTAGTCAACATGGGTCGCTCGGGAAAGTTGCCCTCTGGTGTCTCAGCTAAGTTGAAGCGCTGGAAGAAAGGCC
ACAGCAGCGACAGCAACCCCGCCATCTGCCGCCACCGTCAGGCCGCCCGCAGCCGCTTCTTCAGCCGGCCGTCAG
GAAGGAGTGACCTGACAGTCGATGCTGTGAAGTTACATAATGAGCTGCAGTCAGGGTCCTTGCGCTTGGGCAAAA
GCGAAGCCCCGAGACGCCCATGGAAGAAGAGGCGGAGCTGGTTCTCACCAGAGAAGTCCTCGGGTACCTTCCTGA
GTGGCCTTTCCGACTGCACAAACGTCACCTTCAGCAAAGTACAGCGCTTCTGGGAGTCCAACCTCGGCTGCCACA
AGGAGATCTGTGCTGTTCTGGCTGCTGTCACTGAGGTGATTGCTCCCAGGGAGGGAAGGAGACGGAGACTGAGT
ACTTCGCTGCTCTGATGACAACAATGGAAGCAGTGAGAGTCCCCGGAGTCCCTGGCCGCCGTTGCTTACCTGCTGA
ACCTTGCTCTGAAGCGTGTTCCACAGCCCTGTGCTTATTAAGAAGTTCTCTGATACCTCCAAAGCCTTCATGGATA
TCATGTCAGCTCAGGCCAGCAGCGGCTCCACCTCTGTCTCCGATGGGTCTTTTCTGCTGGCCACCCTTCTGC
GGAAGCAAGACCTGGAGGCCTGGGGCTACCCCGTGACCCTTCAGGTGTACCATGGGTGCTGAGCTTCACGGTGC
ATCCCAAGCCCCAAGATCCGGAAGGCTGCCCAGCATGGAGTATGCTCAGTCCTCAAGGGCAGTGAATTCATGTTTG
AAAAGGCCCTTCCCCATCATCCTGCTGCCATTTCCACTGCCAAGTTCTGCATCCAGGAGATTGAGAAGTCTGGAG
GCTCCAAGGAGGCCACCACCAGCTGCACATGCTGACGCTGCTGAAGGACCTGCTGCCCTGCTTCCCGGAAGGCC
TGGTGAAGAGCTGCAGTGAGACTCTCCTCAGGGTCATGACCTTGAGCCATGTGCTGGTGACAGCCTGTGCCATGC
AGGCCTTTCACAGCCTCTTCCACGCCAGGCCTGGCCTGAGCACCCTGTCAGCAGAGCTCAACGCCCAGATCATCA
CGGCCCTGTACGACTATGTTCCCAAGTGAGAATGATTTACAACCCCTGCTAGCCTGGCTTAAGGTTCATGGAGAAAG
CCCACATCAACCTGGTGAGGTTGCAGTGGGACCTGGGGCTAGGCCACCTCCCTCGCTTTTTTGGAACTGCGGTGA
CCTGCCTCCTTTCCCCACACTCGCAAGTGCTGACTGCTGCTACGCAGAGCCTCAAGGAGATCCTGAAGGAATGCG
TGGCTCCCCACATGGCTGACATTGGCTCCGTGACCTCCTCGGCCTCAGGCCCTGCCCAATCTGTTGCCAAGATGT
TCAGGGCAGTGGAAGGAGGGCCTGACGTACAAATTCCATGCGGCCTGGAGCTCCGTGTTGCAGCTGCTGTGTGTCT
TCTTCGAGGCGTGTGGGAGACAGGCCACCCCTGTGATGAGGAAGTGCCTCCAGTCCCTGTGTGACCTGCGCCTCT
CCCCTCATTTCCCCCACACGGCGGCTCTTGACCAGGCAGTGGGGGCTGCGGTGACCAGTATGGGACCTGAGGTGG
TGCTGCAGGCTGTGCCTTTGGAAATTGATGGCTCTGAGGAGACTCTGGATTTCACCGAGCTGGCTGCTGCCTG
TCATCCGAGACCATGTTTCAGGAAACGCGACTTGGTTTTTTCACCACCTACTTCTTGCCCCTGGCTAACACCCTGA
AGAGCAAAGCCATGGACCTGGCTCAGGCAGGCAGCACAGTGGAATCTAAGATCTACGACACACTCCAGTGGCAGA
TGTGGACACTCCTGCCTGGGTCTGCACAAGGCCTACAGATGTGGCCATCTCCTTCAAAGGGCTGGCACGGACGC
TGGGCATGGCCATCAGCGAGCGTCCAGACCTGAGGGTCACCGTGTGCCAGGCCCTGCGCACCCCTCATCACC AAGG
GCTGCCAGGCAGAGGCTGACCGTGCTGAAGTGAGTCGCTTTGCCAAGAACTTTCTGCCGATCCTCTTCAACCTGT
ATGGGCAGCCCGTGGCAGCCGGGGACACTCCAGCCCTCGCCGGGCTGTGCTGGAAACCATCAGAACTTACCTCA
CCATCACTGACACTCAGTTGGTGAAACAGTCTCCTGGAAAAAGCCAGTGAGAAGGTGCTCGACCCCTGCCAGCTCTG
ACTTTACCAAGATTGTCTGTCTTGGACCTGGTCGTTGGCTTGGCTCCGTGTGCTGACGAAGCTGCCATCAGTAAGC
TATACTCCACCATCCGGCCCTACCTAGAGAGCAAGGCCACGGGGTGCGAAGAAGGCCCTACCAGTGTCTGGAGG
AGGTGTGTGCCAGTCTCAGGGCCCCGGGGCCCTCTTCGTGCAGAGCCACCTGGAGGACCTGAAGAAGACACTGC
TGGACTCGCTGCGGAGCACCTCCTCACC CGCCAAGAGGCCCGTTTGAAGTGCCCTCTACACATCGTGAGGAAGC
TCTCAGCTGAACACAAGGAGTTTCACTAGCTGCCCTCATCCAGAGGTGATCCTGTGCACCAAGGAGGTGTCGGTGG
GCGCACGGAAGAAGCGTTTTGCACTGCTCGTGGAGATGGGCCATGCTTTCCTAAGGTTTGGCTCGAACCAGGAAG
AGGCCCTGCAAGTGCTACCTCGTCTGATCTACCTTGGCTGGTGGGCGCGGTGACCATGGTCAGCTGCAGCATCC
TGGCCCTGACCCACCTCTTTTCGAGTTTAAAGGTCTGATGGGGACCAGTACAGTGGAGCAGCTGCTGGAGAATG
TGTGCCTGCTTCTGGCCTCCCGCACCCTGAGCTGGTGAGTCAAGTCTGCACTGGGCTTCATCAAGGTGGCAGTGACTG
TCATGGACGTGGCGCACCTTGGCCAAACATGTGCACTGGTGTATGGAAGCCATTGGGAAGCTTTCAGATGACATGC
GGCGGCACCTTCGCGATGAAGCTTCGGAACCTGTTACCAAGTTCATCCGCAAGTTTGGATTGAGCTGGTGAAAA
GGCTGTTGCCCGAGGAGTACCACAGAGTCTTGGTCAACATCCGGAAGCTGAGGCCCGGGCCAAGAGGCACCGAG
CCCTGAGCCAGGCTGCCGTGGAGGAGGAAGAAGAGGAGGAGGAGGAGGAGCCGCCAGGCCAGGAAGGTGACA
GCATTGAGGAGATTTTAGCTGACTCAGAGGACGAGGAGGACAATGAGGAGGAGGAAGAACCGGACCGGACGAGGAGC
AGCGGAAGCTGGCACGACAGAGGAGCCGGGCTATGGCTGAAAGAGGGCGGTGGGGACGAGCCCTCAACTTCTTG
ATCCCAAGGTGGCCCAACGAGTCTTGGCCACGCAGCCAGGGCCAGGCCGGGGCAGGAAGAAGGACCACAGCTTCA
AGGTGAGCGCCGATGGCCGGCTGATCATAAGGGAGGAGGCAGACGGCAACAAGATGGAGGAAGAGGAAGGTGCCA

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FIGURE 3024B

AAGGCGAAGATGAAGAGATGGCTGACCCAATGGAAGATGTGATCATCAGGAATAAAAAGCACCAGAAGCTCAAGC
ACCAGAAAAGAGGCTGAGGAGGAGGAGCTGGAGATACCCCCTCAGTACCAAGCTGGAGGCTCTGGCATTTCATCGCC
CTGTGGCCAAGAAGGCTATGCCTGGGGCTGAATACAAGGCCAAGAAAGCAAAAGGTGATGTGAAGAAGAAAGGCC
GGCCGGATCCCTATGCCTACATCCCCCTCAACAGAAGCAAGCTCAACCGCAGGAAGAAGATGAAGCTGCAGGGAC
AGTTCAAAGGCCTGGTGAAGGCTGCCCGGCAGGTTCCCAGGTGGGACACAAAAACCGCAGAAAGGATCGTCGAC
CCTGAGGCCCAGGGCCCCTGGGCTGCCCTGTGGTCCAGTCTGAGGCCCTTTCAGCCCCCAGGCTGCCTTGCCACC
AGCTCCAGGTGCTCAAGATTCTGGCAGAGCCTGGACTCAGGATGACTTGGAAGTGGGGCTTGCTCTCAGAAGTC
CTGGATTTTGGAACTCCAAATGGAATCACCCCTTCAGAGACATCCCTGGTGCCTGGAGATGGGAATGTGGCCTCA
GTGCCTCTGAGTAGGTGCCATGAGGCACCTTTGCTTTCTGCCAGAGTGGCCATGAGCACCAGAACAGATGATCT
CCATTTCCGCCAGCTGCCTGTAGCCACGTGGCATCCTGCCTGTGGTCTGGGTGAGATTACTGTGACCAGATGTA
GAATAAATGTGTCTCATCCTGCAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3025

MGRSGKLP SGVSAKLKRWKKGHSSDSNPAICRHRQAARSRFFSRP SGRSDLTVDVAVKLHNELOSGSLRLGKSEAP
ETPMEEEAELVLTEKSSGTFLLSGLSDCTNVTF SKVQRFWESNSAAHKEICAVLAAVTEVIRSQGGKETETETEFYFAA
LMTTMEAVESPESLAAVAYLLNLVLKRVPSPVLIKKFSDTSKAFMDIMSAQASSGSTSVLRWVLSCLATLLRKQD
LEAWGYPVTLQVYHGLLSFTVHPKPKIRKAAQHGVCSVLKGSEFMFEKAPAHHPAAISTAKFCIQEIEKSGGSKE
ATTLHMLTLLKDLLPCFPEGLVKSCSETLLRVMTLSHVLVTACAMQAFHSLFHARPGLSTLSAELNAQII ITALY
DYVPSENDLQPLLAWLKVMEKAHINLVRLQWDLGLGHLPRFFGTAVTCLLSPHSQVLTAAATQSLKEILKECVAPH
MADIGSVTSSASGPAQSVAKMFRAVEEGLTYKFHAAWSSVLQLLCVFFEACGRQAHPVMRKCLQSLCDLRLSPHF
PHTAALDQAVGAAVTSMGPEVVLQAVPLEIDGSEETLDFPRSWLLPVIRDHVQETRLGFFTTYFLPLANTLKS KA
MDLAQAGSTVESKIYDTLQWQMTLLPGFCTRPTDVAISFKGLARTLGMAISERPDLRVTVQALRTLITKGCQA
EADRAEVS RFAKNFLPILFNLYGQPVAAGDTPAPRRVLETIRTYLTITDTQLVNSLLEKASEKVLDPASSDFTR
LSVLDLVVALAPCADEAAISKLYSTIRPYLESKAHGVQKKAYRVLEEVCA SPQGP GALFVQSHLEDLKKTL DLSL
RSTSSPAKRPRCLKLLHIVRKL SAEHKEFITALIPEVILCTKEVSVGARKNAFALLVEMGHAF LRFGSNQEEALQ
CYLVLIYPGLVGAVTMVSCSILALTHLLFEFKGLMGTSTVEQLLENVCLLLASRT RDVVKSALGFIKVAVTVM DV
AHLAKHVQLVMEAIGKLSDDMRHRFRMKLRLNFTKFIRKFGFELVKRLLP EYHRVLVNIRKAEARAKRHRALSQ
AAVEEEEEEEEEEP AQGKGSIEEILADSEDEEDNEEEERSRGKEQRKLARQRSRAWLKEGGGDEPLNFLDPKV
AQRVLATQPGPGRGRKKDHSFKVSADGRLI IREEADGNKMEEEEGAKGEDEEMADPMEDVI IRNKKHQKLKHQKE
AEEEELEIPPQYQAGGSGIHRPVAKKAMP GA EYKAKKAKGDVKKKGRPDYAYIPLNRSKLNRRKMKLQGQFKG
LVKAARRGSQVGHKNRRKDRRP

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FIGURE 3026

AAAGATTTGGGCGAGAACTTGCGCGGGAGCCGGACTGAGCGGTGCGAGCGCGCAGGCGCGGCCGACGGGGCGGGC
TGCTACTCCGGAATCTGCTAATCCCAGTCGGTGCCGCATCCCCAGCCCGCCGCCATGGCCGCCTACAACTGGTG
CTGATCCGGCACGGCGAGAGCGCATGGAACCTGGAGAACCCTTCAGCGGCTGGTACGACGCCGACCTGAGCCCG
GCGGGCCACGAGGAGGCGAAGCGCGGGCGGGCAGGCGCTACGAGATGCTGGCTATGAGTTTGACATCTGCTTCACC
TCAGTGCAAGAAGAGAGCGATCCGGACCCCTCTGGACAGTGCTAGATGCCATTGATCAGATGTGGCTGCCAGTGGTG
AGGACTTGGCGCCTCAATGAGCGGCACCTATGGGGGTCTAACCCTGCTCAATAAAGCAGAACTGCTGCAAAGCAT
GGTGAGGCCCGAGGTGAAGATCTGGAGGCGCTCCTATGATGTCCCACCACCTCCGATGGAGCCCGACCATCCTTTC
TACAGCAACATCAGTAAGGATCGCAGGTATGCAGACCTCACAGAAGATCAGCTACCCCTCCTGTGAGAGTCTGAAG
GATACTATTGCCAGAGCTCTGCCCTTCTGGAATGAAGAAATAGTTCCCCAGATCAAGGAGGGGAAACGTGTACTG
ATTGCAGCCCATGGCAACAGCCTCCGGGGCATTGTCAAGCATCTGGAGGGTCTCTCTGAAGAGGCTATCATGGAG
CTGAACCTGCCGACTGGTATTCCCATTTGTCTATGAATTGGACAAGAAGTTGAAGCCTATCAAGCCCATGCAGTTT
CTGGGGGATGAAGAGACGGTGCGCAAAGCCATGGAAGCTGTGGCTGCCAGGGCAAGGCCAAGAAGTGAAGGCCG
GCGGGGAGGATACTGTCCCCAGGAGCACCCCTCCCTGCCCGTCTTGTCCCTCTGCCCCCTCCACCTGCACATGTCA
CACTGACCACATCTGTAGACATCTTGAGTTGTAGCTGCAGACGGGGACCAGTGGCTCCCATTTTCATTTTAGCCA
TTTTGTGCGCTGCACCCACTCCCTTCATACAATCTAGTCAGAATAGCAGTTCTAGAGCACAGGTTCTCAGTCTAA
GCTATGGAAAAGCTCCCTTATCCAACAGAGTTTAAAGTAGTGACTTGGGTTTTTGGGAGTGCTTTGTTTACTA
AGGACTTTGGGGAGGAACCATGCTAAGCCATGACCAGTGAGGAGAAGCAACAGAGCCTGTCTGTCCCCATGAGCG
GAGTCTGTCTCTGCTCTTCTGCAGTCAGGTCACTGCCTACTGCCTGGGGGCTCTAGTCATTCCAGTGAAGACG
AATGTAACCTGCGTGGTGATGTGACAACTGTTTCCCTGACCCAGAGGATCTGGCTCTAGGTTGGGATCAAT
CCTGAATTTGTTATGTGTTAATTTACTTTTATTAATAAAGTATAGTATATATAATAACAAACAATAACCTTCT
GGGGTTTCTTGTGGCGGTTGAAATAGTCCCACATGTGGTCATCAGAAAATAAGCCATTCCTCATACCAATATAGG
ATCAGCTCCTTGACCTCTGAGGGGCAGGAGTGCTTCCCTGGTGTGTGTATTAGAATCCCTTCCTGCCTTGTTTCAT
GGCAGTGAAATGCCTCTTGGTCTGTCCAAGTGTATCTTTCACTGATTTCTGAATCATGTTCTAGTTGCTTGACC
CTGCCACATGGGTCCAGTGTTTCATCTGAGCATAACTGTACTAAATCCTTTTTCCATATCAGTATAATAAAGGAGT
GATGTGCAAT

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FIGURE 3027

MAAYKLVLI RHGESAWNLENRFSGWYDADLSPAGHEEAKRGGQALRDAGYEFDICFTSVQKRAIRTLWTVLDAID
QMWLPVVRTWRLNERHYGGLTGLNKAETAAKHGAEQVKIWRRSYDVPPPPMEPDHPPFYSNISKDRRYADLTEDQL
PSCESLKDTIARALPFWNEEIVPQIKEGKRVLIAAHGNSLRGIVKHLEGLSEEAIMELNLPTGIPIVYELDKNLK
PIKPMQFLGDEETVRKAMEAVAAQGKAKK

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FIGURE 3028

GGTTGAGGATGGGCTGGCGGCGGGTCCGGGTCCGCTGCCTGGCGGTGCGGGCGGCGGGCCATGGTGGTTTGGATT
GAGCCGGGCCCCGGCCGGGGCGCCGAGTCGGAGGGGGTGGCAGTGAGCGGCGGCAGAGGCTACGGGGCTCGGTTTG
GCTGACTGGGGAGTCGGCAGGCGGCAGGAACCATGCGAGGCCAGCGGAGCCTGCTGCTGGGCCCCGGCCGCCTCT
GCCTCCGCCTCCTTCTGCTGCTGGGTACAGGCGCCGCTGTCCACCTCTACTCCGGGGTCTAGTACAGCGCTGGC
GCTACGGCAAGGTCTGCCTGCGCTCCCTGCTCTACAACCTCCTTTGGGGGCAGTGACACCGCTGTTGATGCTGCCT
TTGAGCCTGTCTACTGGCTGGTAGACAACGTGATCCGCTGGTTTGGAGTGGTGTTCGTGGTCTGGTGATCGTGC
TGACAGGCTCCATTGTAGCTATCGCCTACCTGTGTGCTCCTGCTCTCATCTCCGAACCTACTCAGTGCCACGAC
TCTGCTGGCATTCTTCTATAGCCACTGGAATCTGATCCTGATTGTCTTCCACTACTACCAGGCCATCACCCTC
CGCCTGGGTACCCACCCAGGGCAGGAATGATATCGCCACCGTCTCCATCTGTAAGAAGTGCATTTACCCCAAGC
CAGCCCGAACACACCCTGCAGCATCTGCAACAGGTGTGTGCTGAAGATGGATCACCCTGCCCTGGCTAAACA
ATTGTGTGGGCCACTATAACCATCGGTACTTCTTCTCTTTCTGCTTTTTCATGACTCTGGGCTGTGTCTACTGCA
GCTATGGAAGTTGGGACCTTTTCCGGGAGGCTTATGCTGCCATTGAGAAAATGAAACAGCTCGACAAGAACAAAC
TACAGGCGGTTGCCAACAGACTTATCACCAGACCCACCCACCTTCTCCTTTTCGAGAAAGGATGACTCACA
AGAGTCTTGTCTACCTCTGGTTCCTGTGCAGTTCTGTGGCACTTGCCCTGGGTGCCCTAACTGTATGGCATGCTG
TTCTCATCAGTCGAGGTGAGACTAGCATCGAAAGGCACATCAACAAGAAGGAGAGACGTCGGCTACAGGCCAAGG
GCAGAGTATTTAGGAATCCTTACAACCTACGGCTGCTTGGACAACCTGGAAGGTATTCTGGGTGTGGATACAGGAA
GGCACTGGCTTACTCGGGTGCTCTTACCTTCTAGTCACTTGCCCCATGGGAATGGAATGAGCTGGGAGCCCCCTC
CCTGGGTGACTGCTCACTCAGCCTCTGTGATGGCAGTGTGAGCTGGACTGTGTCAGCCACGACTCGAGCACTCAT
TCTGCTCCCTATGTTATTTCAAGGGCCTCCAAGGGCAGCTTTTCTCAGAATCCTTGATCAAAAAGAGCCAGTGGG
CCTGCCCTTAGGGTACCATGCAGGACAATTCAAGGACCAGCCTTTTACCCTGCAGAAGAAAGACACAATGTGGA
GAAATCTTAGGACTGACATCCCTTTACTCAGGCAAACAGAAGTTCCAACCCAGACTAGGGGTCAGGCAGCTAGC
TACCTACCTTGCCAGTGCTGACCCGGACCTCCTCCAGGATACAGCACTGGAGTTGGCCACCACCTCTTCTACTT
GCTGTCTGAAAAACACCTGACTAGTACAGCTGAGATCTTGGCTTCTCAACAGGGCAAAGATAACCAGGCCTGCTG
CTGAGGTCACTGCCACTTCTCACATGCTGCTTAAGGGAGCACAAATAAGGTATTTCGATTTTTAAAGAT

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FIGURE 3029

TCGCGTTATGGCCGCTGCCGCGGCTGTGGAGGCGGCGGCGCCTATGGGTGCCCTATGGGGCCTCGTGCACGACTT
CGTCGTGGGTACAGCAAGAGGGCCCCGCTGACCAGGTGGCTGCAGATGTGAAATCTGGCAACTATACAGTGTTACA
AGTTGTGGAAGCCCTTGGGTCTCTCTAGAGAATCCAGAACCCCGAACTCGGGCACGAGGAATCCAGCTTTTGTG
ACAGGTGCTACTCCACTGTACACCTTGCTCCTGGAGAAGGAAGTGGTACACCTGATACTGTTCTATGAGAACCG
GCTGAAGGACCATCATCTTGTGATCCCATCTGTCTGCAGGGTTTGAAGGCACCTAGCCTGTGTGTGGCCCTGCC
CCCAGGGCTGGCTGTTTCTGTGCTTAAAGCCATCTTCCAGGAAGTGCATGTACAGTCCCTGCCACAGGTGGACCG
ACACACAGTCTACAATATCATCACCATTATTTATGCGAACCCGGGAAGAAGAGCTAAAGAGCCTAGGAGCTGACTT
CACCTTTGGCTTCATCCAGGTGATGGATGGGGAAGGATCCCCGTAATCTTCTGGTGGCCTTCCGCATCGTCCA
TGACCTCATCTCCAGGGACTATAGCCTGGGACCCTTTGTGGAGGAGTTGTTTGAAGTGACATCCTGTTATTTCCC
TATCGATTTTACCCCTCCACCTAATGATCCCCATGGTATCCAGAGAGAAGACCTCATCTGAGTCTTCGCGCTGT
GCTGGCTTCTACACCACGATTTGCTGAGTTTCTGCTGCCCTGTGATTGAGAAAGTGGATTCTGAGGTCTGAG
TGCCAAGTTGGATTCTCTACAGACTCTGAATGCTTGCTGTGCTGTGTATGGACAGAAGGAAGTGAAGGACTTCCT
CCCCAGCCTTTGGGCTTCTATCCGCAGAGAGGTGTTCCAGACGGCAAGTGAGCGGGTGGAGGCAGAGGGCCTGGC
GGCCCTCCACTCCCTGACTGCGTGTTTGTCTCGCTCTGTGCTGAGGGCTGATGCTGAGGACCTCCTTGACTCCTT
CCTTAGCAACATTCTACAGGACTGCAGGCACCACCTGTGTGAACCGGACATGAACTGGTGTGGCCTAGTGCAAG
CTGTTGCAGGCAGCTGCAGGTGCATCTGCCCGGCTGTGACTCTGTACCAGCAATGTACTGCCTTTACTGCTG
GAACAGTTCCACAAGCACAGTCAGAGCAGCCAGCGGGCGGACAATCCTTGAAATGCTCCTGGGTTTCTTGAAGCT
GCAGCAGAAATGGAGCTATGAAGACAAAGATCAAAGGCCTCTGAATGGCTTCAAGGACCAGCTGTGCTCACTGGT
ATTATGGCTCTAACAGACCCACAGCACCAGCTTCAGCTTGTGGCATCCGTACACTGACAGTCTTGGGTGCCCA
GCCAGATCTCCTATCTTATGAGGACTTGGAGCTGGCAGTGGGTACCTGTACAGACTGAGCTTCCTGAAGGAGGA
TTCCAGAGTTGCAGGGTGGCAGCACTGGAAGCATCAGGAACCCTGGCTGCTCTTACCCTGTGGCCTTCAGCAG
CCACCTCGTACCCAAGCTCGCTGAGGAGCTGCGTGTAGGGGAGTCAAATTTGACTAACGGAGATGAGCCCACCCA
ATGCTCCCGGCATCTGTGCTGTCTGCAAGCCTTGTGAGCTGTATCAACACATCCCAGCATCGTCAAGGAGACACT
GCCTCTGCTGCTGCAGCATCTCTGGCAAGTGAACAGAGGGAATATGGTTGCACAATCCAGTGACGTTATTGCTGT
CTGTGAGAGCCTCAGACAGATGGCAGAAAAATGTGAGCAGGACCCTGAGAGTTGCTGGTATTTCCACCAGACAGC
TATACCTTGCCCTGCTTGCCCTGGCTGTGAGGCCTCTATGCCAGAGAAGGAGCCCTCAGTTCTGAGAAAAGTACT
ATTGGAGGATGAGGTGTTGGCTGCCATGGTGTCTGTCTATTGGCACTGCTACAACCCACCTGAGCCCTGAGTTAGC
TGCCAGAGTGTGACACACATTGTGCCCTCTTCTTGGATGGCAACGTGTCCTTTCTGCCCTGAAAACAGCTTCCC
GAGCAGATTCCAGCCATTCCAGGATGGCTCCTCAGGGCAGAGGCGGCTGATTGCACTGCTTATGGCCTTTGTCTG
CTCCCTGCCCTCGAAATGTGGAAATCCCTCAGCTGAACCAACTCATGCGGGAGCTTTTGGAACTGAGCTGCTGCCA
CAGCTGCCCCCTTTTCTTCCACCGCTGCTGCCAAGTGCTTTGCAGGACTCCTCAACAAGCACCCCTGCAGGGCAGCA
GCTGGATGAATTCTACAGCTAGCTGTGGACAAAGTGGAGGCTGGCCTGGGCTCTGGGCCCTGTCTAGTCAGGC
CTTCACTCTTCTTCTCTGGGTAACAAAGGCCCTAGTGCTCAGATACCATCCTCTCAGCTCCTGCCCTTACAGCCCG
GCTCATGGGCCTCCTGAGTGACCCAGAATTAGGTCCAGCAGCAGCTGATGGCTTCTCTGCTCATGTCTGACTG
CACTGATGTGCTGACTCGTGCTGGCCATGCTGAAGTGGGATCATGTTCCGCCAGCGGTTCTTACAGATAATGT
GCCTGCTTTGGTCCAGGGCTTCCATGCTGCTCCCCAAGATGTGAAGCCAACTACTTGAAGGGTCTTTCTCATGT
ACTTAACAGGCTGCCCAAGCCTGTACTCTTGCCAGAGCTGCCACGCTTCTTCTTCTGCTGCTGGAGGCCCTGTC
CTGCCCTGACTGTGTGGTGCAGCTCTCCACCCTCAGCTGCCTTCAGCCTCTTCTACTGGAAGCACCCCAAGTCAT
GAGTCTTACGTGGACACCCTCGTCACCAAGTTTCTGAACCTCAGCTCTAGCCCTTCCATGGCTGTCCGGATCGC
CGCACTGCAGTGCATGCATGCTCTCACTCGCTGCCACCCCTGTGCTGCTGCCGTACAAACCACAGGTGATTG
GGCCTTAGCCAAACCCCTGGATGACAAGAAGAGACTGGTGGCAAGGAAGCAGTGTGAGCCAGAGGGGAGTGGTT
TCTGTTGGGGAGCCCTGGCAGCTGAGCCCTCAGTCTGGCCTAGACTGTTCTGACAATCTAACCTGGGATTACTA
ACTGTTGAGCCATCTTCCCCAAAGCAGGGAACCACTGGTCTCTGACTGCCTTTCCACAGACACAGCACAAATG
CTAGGCCTCTGTTGCATGGCTGTACAAAGAACATAAGAGTCCATATTTCTAGTGGATTGTAAATAAGTGTGTG
TGAGACACTTGCGTTTGAAGAAAGATCTAGGGTCTGGGTCTCTTGCAATTTATATGTCAGAAAAGGGGCGATAG
CTGCTGAGGGGTGAGTGCAATATGAGTGTGGCCCTGAGGACCAGGGCTGGCAGATGTTGTCTACCTGCTGAG

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FIGURE 3030

MAAAAAVEAAAPMGALWGLVHDFVVGQQEGPADQVAADVKSNGYTVLQVVEALGSSLENPEPRTRARGIQLLSQV
LLHCHTLLLEKEVVHLILFYENRLKDHHLVIPSVLQGLKALSLCVALPPGLAVSVLKAIFQEVHVQSLPQVDRHT
VYNIITNFMRTREEELKSLGADFTFGFIQVMDGEKDPRNLLVAFRIVHDLISRDSLGPFFVEELFEVTSCYFPID
FTPPPNDPHGIQREDLILSLRAVLASTPRFAEFLPLLLIEKVDSEVLSAKLDSLQTLNACCAVYGQKELKDFLPS
LWASIRREVFQTASERVEAEGLAALHSLTACLSRSVLRADAEDLLDSFLSNILQDCRHHLCPEPDMKLVWPSASCC
RQLQVHLPGPVTLS PAMYCLYCWNSSSTTVRAASGGTILEMLLGFLKLQKWSYEDKDQRPLNGFKDQLCSLVFM
ALTDPSTQLQLVGIRTLTLVLGAQPDLLSYEDLELAVGHLYRLSFLKEDSQSCRVAALEASGTLAALYPVAFSSHL
VPKLAEEELRVGESNL TNGDEPTQCSRHLCCLOALS AVSTHPSIVKETLPLLLQHLWQVNRGNMVAQSSDVI AVCQ
SLRQMAEKCQQDPESCWFYHQTAIPCLLALAVQASMPEKEPSVLRKVLEDEVLAAMVSVIGTATTHLSPELAAQ
SVTHIVPLFLDGNVSFLPENSFP SRFQPFQDGSSGQRR LIALMAFVCSLPRNVEIPQLNQLMRELLELSCCHSC
PFSSTAAAKCFAGLLNKHPAGQQLDEFLQLAVDKVEAGLGSGPCRSQAFTLLLWVT KALVLRYPHPLSSCLTARLM
GLLSDPELGPAADGFSLLMSDCTDVLTRAGHAEVRIMFRQRFFTDNVPALVQGFHAAPQDVKNYKGLSHVLN
RLPKPVLLPELPTLLSLLLEALSCPD CVVQLSTLSCLQPLLEAPQVMSLHVDTLVTKFLNLSSSPSMAVRIAAL
QCMHALTRLPTPVLLPYKQVIRALAKPLDDKKRLVRKEAVSARGEWFLLGSPGS

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FIGURE 3031

CGCTGCTTAGGCTCCGCGGCCTCCAAGCTGTAGCTATGACGGCGCGCGGGACTCCGAGCCGCTTCTTGCCAGCG
TTCTCCACAACGGACTGGGTGCTATGTGCAGCAGCTGCAGCGTCTGAGCTTCAGCGTCAGCCGCGACGGCGCCT
CGTCTCGCGGCGCCAGGGAGTTCGTGGAGCGGGAGGTGATCGACTTCGCCCAGCGAATCCAGGGGTCTGTAATAT
ATGTAAACTCGCGTCCGTGCTGCGTGCCAGAGTAGTGGCCGAATACCTTAACGGGGCTGTGCGCGAGGAGAGCA
TCCACTGCAAGTCGGTCGAGGAGATCTCGACGCTGGTGCAGAAGCTGGCCGACCAGTCGGGCTTGGACGTGATCC
GCATCCGCAAGCCCTTCCACACCGACAACCCTAGCATCCAGGGCCAGTGGACCCCTTCACCAACAAGCCGACCAC
GTTCCGCGGGCTACGCCCCGAGAGGTTTCCAGGATCCTGCCCCAGCCAGGTGCAAGCACAGTGAAGAGTTGCCCC
ACCAACTGCAGCCCCAGGCTTTGGACTGTTACTCCGGTAAAGGTGGTTCTTCCCCTTTGGGATTCCAAGCCCAGG
CAAATGGAACCCATCAATGGGCAAGTTGACAGAGGTTCTGCTTGGGATAATGAAGAGCTGCCTGTTTCTTTCCAG
TGCCTGCTTCTGGGGGCAGTGACCTTGTGAACCACTCATTTTTATGCAAGTGGCATCCCTAAAACCTGAGATGAG
GAAGACTTCAAGGGTTTTACAGGGCCCTTGTTTTTAAATCCAAATTGATAATAATGATCTCAAAACACAGTGAG
AGGTCTGAAGGCTGGCTTCTGAAGAATCCCTGATGTCTTATTGGAACAACCACTGAGCTACGGAGAGCTCTGCTG
TGATGGGCTAGGCACCTTATATCTGTGTGAATACAGATTTATAAAACAGGTTAATAAACTTATCCAAGGTCA

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FIGURE 3032

MTARGTPSRFLASVLHNGLGRYVQQLQRLSFVSRDGASSRGAREFVEREVIDFARRNPGVVIYVNSRPPCCVPRV
VAEYLNQAVREESIHCXSVEEISTLVQKLADQSGLDVIRIRKPFHTDNPSIQGQWTPSPTSRPRSAGYAPERFRI
LPQPRCKHSEELPHQLQPQALDCYSGKGGSSPLGFQAQANGTHQWAS

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FIGURE 3033

CTGATCAGGAGGAGGTTTCTAGCTGGCTGATACAATGTTTGGCCTTACCAAGGTTACAGATGACACACTCAAGCGTT
TCAGTGTGCGATATCTGCGACCTGCTCGCAGTCTTGCTTCCCTTGGTTCTCCCCTGGGGGTTTCTAGGATTACGAG
GCCTGAAGCTCCTAGAGGCTAAATGCCAGGGGGATGGAGTGAGCTACGAGGAAACCCTATTCCCCGACCCAGCG
CCTACCACAATCTGTTTGGATTACCACTGATTAGTCGTCGAGATGCTGAGGTGGTACTGACGAGTCGTGAGCTTG
ACAGCCTGGCCTTGAACCACTCCACGGGGCTGCCTACCTTACTCTACCCCGAGGAACGACCTGCTTACCCCTG
CCTTACTCCCTTACCTGGAACAGTTCCGGCGGATTGTATTCTGGTTGGGGGATGACCTTCGGTCCCTGGGAAGCCG
CCAAGTTGTTTGACGAAAACCTGAACCCCAAACGATGCTTCTTGGTGCGACCAGGAGACCAGCAACCCCGTCCCC
TGGAGGCCCTGAACGGAGGCTTCAATCTTTCTCGTATTCTTCGTACCGCCCTGCCTGGCACAAGTCCATCG
TATCTTTCCGGCAGCTTCGGGAGGAGGTGCTAGGAGAAGTGTGCAATGTGGAGCAAGCAGCTGGCCTCCGCTGGA
GCCGCTTTCCAGACCTCAATCGTATCTTGAAGGGACATCGAAAGGGCGAGCTGACGGTCTTCACAGGGCCAACAG
GCAGTGGAAAGACGACATTTCATCAGTGAGTATGCCCTGGATTTGTGTTCCAGGGGGTGAACACACTGTGGGGTA
GCTTCGAGATCAGCAATGTGAGACTAGCCCGGGTCATGCTGACACAGTTTGCCGAGGGGGCGGCTGGAAGATCAAC
TGGACAAATATGATCACTGGGCTGACCGCTTTGAGGACCTGCCCTCTATTTTCATGACTTTCCATGGACAGCAAA
GCATCAGGACTGTAATAGATAACAATGCAACATGCAGTCTACGTCTATGACATTTGTCATGTGATCATCGACAACC
TGCAGTTTCATGATGGGTACGAGCAGCTGTCCACAGACAGGATCGCAGCTCAAGACTACATCATCGGGGTCTTTC
GGAAGTTTGCAACAGACAATAACTGCCATGTGACACTGGTCATTACCCCCGAAAGAGGATGATGACAAGGAAC
TGCAGACAGCGTCCATTTTGGCTCAGCCAAAGCAAGCCAGGAAGCAGACAATGTTCTGATCCTGCAGGACAGGA
AGCTGGTAACCGGGCCAGGGAAACGGTATCTGCAGGTGTCCAAGAACCCTTTGATGGAGATGTAGGTGCTTCC
CGCTTGAGTTCAACAAGAACTCCCTCACCTTCTCCATTCCACCAAAGAACAAGGCCCGGCTCAAGAAGATCAAGG
ATGACACTGGACCACTGGCCAAAAGCCCTCTTCTGGCAAAAAGGGGGCTACGACACAGAACTCTGAGATTTGCT
CAGGCCAGGCCCCCACTCCCGACCAGCCAGACACCTCCAAGCGTTCAAAGTGAAGGCCCTGCAGAGCTGGTCACT
GAAATGAGCCTGATAGGATAGGCTGGAGCATAAACTCTGCAAGGGCTCCTCTATCCTGTGGTCTGAGCTGTGT
GCCCTTCTCAGTCTGAGGGGCCTAACCTAGAGCAGGTTTCCATAGTGAGAAAATTCAATGTAGCAGACTACTGAG
AACTACTGTGTTGCTCAGGCTTTGTTTGGGTCTGTATATACAGCACTGAAAAGAGAGATAAAGTCCCTGCCT
GCATGCATTCTGGCGGAAGAGACAAGCAAGCAATGAACAAATTAGCAGAAAACCTAGTTTTAGTGAAAAATGCTG
TAAAGAAAATAGAAATGCGATAGAGTGCTGGCAGGCTAGTGATAGATAAGTGGTCTGAAAAGGTGTCTCTGAGCCG
AGGGCATGTGAGCTGGGGCCTAAACAAGTAGAAGGAGAGAGCCACGTGAACATCCGGCGAAGGGGACCCAGGCAG
AGAGAAAAGGAAATCCAAGCCCTGAGGTAGGAATGAGCAGGTGAGATTCAAGGCAGTGAGGTGAGGCCGCATGAA
CCTGGAGGGGAATCGGGGACTTCATGCGAACTCCAGCCTAGGCTTTCAAAGTCAAAGGGTGATACAGTGGGTAC
CAAGCTCCTCTGCTCCCCACTTTGTAGAGCCTAGCATGAGGTGGCATGTACTAGAATTGGATCCTAGGTGCTTAG
CCCTGCAATATCAGGGCCTCACTGGTGGGAGCTGCCTCGGGCTGGGTGCTTGGTCATAGAGCCATAGAAGGAAG
CTGTGAGCCCGGAGTGCTGCCACCTAGACACTGATGCCATTGTGTGCTGCCTCAAGACTGCTGGAGTCAGGACA
TTTTATAGAGCCTTTTCCAGTTTTACTAAAAAATTTTCCATTGAAAAAAAAAAAAAAAAAAAA

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FIGURE 3034

MFGLTKVTDDTLKRFSVRYLRPARSLVFPWFSPGGSGLRGLKLEAKCQGDGVSYEETTIPRPSAYHNLFGGLPLI
SRRDAEVVLTSLREDSLALNQSTGLPTLTLPRTTCLPPALLPYLEQFRRIVFWLGDDLRSWEAAKLFARKLNPK
RCFLVRPGDQQPRPLEALNGGFNLSRI LRTALPAWHKSIVSFRQLREEVLGELSNVEQAAGLRWSRFPDLNRILK
GHRKGELTVFTGPTGSGKTTFISEYALDLC SQGVNTLWGSFEISNVRLARVMLTQFAEGRLEDQLDKYDHWADRF
EDLPLYFMTFHGQQSIRTVIDTMQHAVYVYDICHVIIDNLQFMMGHEQLSTDRIAAQDYIIGVFRKFATDNNCHV
TLVIHPRKEDDDKELQTASIFGSAKASQEADNVLI LQDRKLVTGPGKRYLQVSKNRFDGDVGVPLEFNKNSLTF
SIPPKNKARLKKIKDDTGPAKKPSSGKKGATTQNSEICSGQAPTPDQPDTSKRSK

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FIGURE 3035A

GC GGCCGCCGCCGCCGCTGGCCCTTTGTGCTGGAACAATGACCAGCTGCCGCTGGCCCCGGGGCCCCGGCTGGG
GTTGAGGGTGACCACCGCCGCCGCCGCTCGAGCCGAACCGAGCCCCAGACACGCAGTCACAGGGCGTCGGAGG
GAGGGCTCCCAGCTGCCGCCGAGCAGCCCTACGTGCGCCCCGGCGGATTGCGGTGACGCGGGTGCTTGCGCGTG
TCCGCGCCCCGGGGCGGAGACGCCCCCTCGGACCCTCCCCTGCGCGGTGCCGCCACTCGCACCGGGCGGGGGCTG
GCCAGGGCCGGGGCGCCGCGGAGGCGGAGGCGGGGCTGGGCCGGGCAGCTCCGAGTGCGCGCGCGGGGCCAGG
GCCGGGGCCGGGGCGGGGCCGAGCCGAGCCGGGGCCGGGCGGCGCGCCTGTGGAGCGCTGGGGCGGCCTGG
GGCTGAGCATGGAGCAGCGCGGCGGAGGTGAGGGGGCGGGTCTGGGAGGCGGCCTGGGGAGCCCCAACTTAT
GCGCGGTGGAATCCAGCCGGGGGACGGCGTTCCCCAGTCGCCCCCACTTTCTGGAAGGGGGCTGGACTCTGGA
GAATGGGTGAGGGGCTCCTGGCTTCCCGCCGAGAATGGGAACCTCGTGATCGCAGACTTGACCCCGCTTGACTGG
TCCTTGAGTTTGGGTGGGAGGGAGACTTTCCCAACTCTTCAGATCCGTCTCCGGCCCTGAACCAGCTCCAGCC
CTCTGCTCTCCTCAGCCCACTAAAAGGGGGGTGCTCCTGGGCCAGAGTGATTGCTCAGGGAGTGCTGGGGAGAAT
GAGGGGTTCCTATCTCCACAGCCACAAACGCATTTCTCAAAATGGAGCCTCCACTTGCCCCCTCTTCTCTTTTCG
GGCTCCAAGAGCGGGAGCCGGCCTGGCTGGGCCTGGCTTTCCAGACTCCTGGCTCTGGCTCCCTGGATGTGTGGC
TCTCAGGGCCCGCTCTGTGGCACTTTGGACTTAAGGGCCCTCGGCTCCGTGGGGTTGGGGGGCCCTGGCTCACT
GGGTCCCGCTGGCTGTCCCTTGTGCGCCTGACCCTCGGGCCTCTCCGAGTCTTTGTCTCTTTGGGTCCCTGTC
TTTCTCTGAGCCTGTCTCCTTCAATTTTCACTTTCTCCGTGCTCGCTGAAGTGGGGAAATGCAACAGAGGT
GCCAGCCCCCTTGCCCCCTAAGAAGTCCCTTCCCACTGTTCACTCCACACCCTGGAGTGGGGCCAGAGAGGGG
AGGGGAGGGGGTTCTCTATCTGCTCTGCTGGGGGTGGGGTGTGTGGGTGGTCTGAGCCCCAGCCCTACAGAGG
GGCCTGTGGTCACTCCCTGCTCCTGGCCTACCCCTCCCCAGCTCCCCGCAGCTCCTGCCCCAGCGTGACACCT
CTTCTGGTTTCGAGTGTCTTTTGACTTGGGTGGGAAGGAGGGCGGTGGATTAATGGAGGGCATGCGAGAAAGA
AGGGGAACAGATCAGGCAAAGGAGTTAGATAATGTCCACCTCTCCCCACACGCCGAAGAGAGAAGGAAACAGGC
TCCCCCACCAATGGGCCCTCAAGCCACCAGGCTCCCACCACTCTCATACCTGCGTGCCACGTTACAGGCTC
CACTGCACCACTCACCTTCTTAGTACACACAAACACAGGAGTACACATAAACTCATGAACCTACTGACAAGT
CTGTCCAGGCACCGTCTCTCCACACACCACAAATTCATTGTTAGATCCACATTTATAACTTTACAGGCTTTC
TAATGACCCTGATCCACATACTCTTCTAAGATATACACATGTGAATTCACACATGAACCTCATATGTATGTGAAT
GAACTGATATATCAAACATGCATAGACTCACATGATGTTTTCACACACATTTTCATACACACGTGTTCAATTTCA
TGCTCCTGTGCATGTAGTCACACAACAAATAACTAAATGCACACACTCCTACTCCAGTGCAATTCTCTGTCCAC
TTCTTGGCCCCGCTCTGCATGATGACTTCAGCAGATGCCTAAGTCCTGGTCATCAGCGGCCTCGGGACTGGGACT
AGGGAGGGGGTTCCGGGTGGAGGCTTGCAAGTGCCTCCAGGAAGGAGCAGAGCCTGGGGAGGTGGAGCCCTCTTG
CCTGGGCTCTGTGGAAGTGAGGTTTGGAGCAGCCTCCAGAGGTGAAGGCAGGGCATCTACCTTCCCTCCCTCAG
GGTAGTTTGGGGACCTTCTGAAGCTGTAGGGTTTCAGAGAGGTGGCAGTGGGGCAGAGCCTGTGGAGGCTCCT
TCAGGCCTCAGGCCTCACCGATTGGGTGTGCAGAGGCTAGGAGTTGTGATGGAACCTGGTATGAGCCTGCATCC
ACCTCTGGGAGGCAGGAGACCCCAAGGACACCTGTGGACTCCCTAAGAGCCGCGGGTTTCTTATTTAGCCAGAT
CGACAGAGAGGCAGTTTAGCCGCTTCTGTCTGAGAGAACTGAGGCCAGCAGAGGGAGGCAGGGCACTGCCT
GGCCTTGGCTCTTTGTTCCTAATTACCATCTGAGGTGCTGATTGCACCCCTGAGGTACCTCTGCCCAAACCTGCC
CTGTAATGAGGCCACCTGGCTGAGAGGACCAGGGACCTGTGCTTCAAGCTGGTAGAGAAGGCCCTCCCTCACCT
GAGTCTGGCCTCTGTGGAGGATGCAGGATTGGGCTTGGGCCTGGGTCTTTGCTGCCAGGTGGCCCTGCGGTAAT
CATCCAGGCCTCCCATGCCCTCTCAGCATCTCTGCTGAGTGAATTCCTCCTCAGCCCTGTTTACAGCAGCATTGG
GCAGTGTGGTTTGGGGCCAGGGGGAATTGAGATTCATTCCAGCACTTGAAGGGGGAGTCTTGGTGGGGATCAGG
GCTTGTTACTGATGTCAAGGAGGTGTTTGGTCAGGATCAGTGGGTGAGGAGGGGTCTCAAGGTGGAGGGACTCTG
ACACCACTGCCCTGCTTACAGGTGCGCTGCGAGGCCGCTGGCCAGGCCTGAGCCTCTGCCACCATGGCCATTGTG
CAGACTCTGCCAGTGCCACTGGAGCCTGCTCCTGAAGCTGCCACTGCCCCACAAGCTCCAGTCAATGGGTAGTGTG
AGCAGCCTTATCTCAGGCCGGCCCTGTCCCGGGGGGCCAGCTCCTCCCGCCACCACGGCCCTCCTGGGGCCACC
TTCTTCCGCCAGCAGGATGGCCTGCTACGGGGTGGCTATGAGGCACAGGAGCCGCTGTGCCAGCTGTGCCCCCT
AGGAAGGCTGTCCCTGTACCAGCTTACCTACATCAATGAGGACTTCCGGACAGAGTCACCCCCAGCCCAAGC
AGTGATGTTGAGGATGCCCGAGAGCAGCGGGCACACAATGCCACCTCCGCGGGCCACCACCAAGCTCATCCCT
GTCTCTGAAAGCTGGAGAAGAATGAGAGAATCCTGATCCGCCCAACAGCCTTCAAGCCAGTGCTGCCCAA
CCTCGAGGGGCTCCGTCCCTGCCTAGCTTCATGGGTCTCGGGCCACCGGGCTGTCTGGGAGCCAGGGCAGCCTG

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[illegible]

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FIGURE 3036

MGSVSSSLISGRPCPGGPAPPRHHGPPGPTFFRQQDGLLRGGYEAQEPLCPAVPPRKAVPVTSFTYINEDFRTESP
PSPSSDVEDAREQRAHNAHLRGPPPKLIPVSGKLEKNMEKILIRPTAFKPVLPKPRGAPSLPSFMGPRATGLSGS
QGS LTQLFGGPASSSSSSSSSSSSAADKPLAFSGWASGCPSGTSLSDSGRNSLSSLPTYSTGGAEPTTSSPGGHLPSH
GSGRGALPGPARGVPTGPSHSDSGRSSSSSKSTGSLGGRVAGGLLGSGTRASPSSSSCGERSPPPPPPPPSDEALL
HCVLEGKLRDREAELQQLRDSL DENEATMCQAYEERQRHWQREREALREDCAAQAQRAQRAQQLLQLQVFLQQLQE
KRQLQDDFAQLLQEREQLERRCATLEREQRELGPRLEETKWEVCQKSGEISLLKQQLKESQAEIVQKGSELVALR
VALREARATLRVSEGRARGLQEAAARELELEACSQELQRHRQAEQLREKAGQLDAEAAGLREPPVPPATADPF
LLAESDEAKVQRAAAGVGSLRAQVERLRVELQRERRRGEEQRDSFEGERLAWQAEKEQVIRYQKQLQHNYIQMY
RRNRQLEQELQQLSLELEARELADLGLAEQAPCICLEEITATEI

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FIGURE 3037

CTGCTGGTAAGTGGTCTATTCTGCCACCCCGGGTGACTAGCTTGGCCAGTAGTCGACCCACCCGGGGACCG
ACTCTGGGGGTTGGAGAGACTCTTGGGGCCGGGGTCGGGCACTCCAGCTTCTTCTAGCCCCGAGCTGGGATTCC
CTGGCCTGCGCCAGCTGCGTACACGGCGAGTACACCGCACCTGCCCGGGACTTCACCCGAGCTGCGGAGACTCCT
CCATTCCCGGAGGGCTCCCCACACCTGCTGCGGGCGTGCCCCATCTCCCCGAGCTGCGGCGCTGAGCACCCCCA
TGTCGAGAGGGCTGAGACCAGGACAGCAGCCCTGACCAACGCTCCAATAGGCCGGGATCCAGCCATACTTCAATGG
ATCCCAGGGGTATCTTGAAGGCATTTCCCAAGCGGCAGAAAATTCATGCTGATGCATCATCAAAAGTACTTGCAA
AGATTCTTAGGAGGGAAGAGGGAGAAGAAGCAGAAGAGTGGCTGAGCTCCCTTCGGGCCCCATGTTGTGCGCACTG
GCATTGGACGAGCCCGGGCAGAACTCTTTGAGAAGCAGATTGTTTCAGCATGGCGGCCAGCTATGCCCTGCCAGG
GCCAGGTGTCACTCACATTGTGGTGGATGAAGGCATGGACTATGAGCGAGCCCTCCGCTTCTCAGACTACCCC
AGCTGCCCCCGGGTGCTCAGCTGGTGAAGTCAGCCTGGCTGAGCTTGTGCCTTCAGGAGAGGAGGCTGGTGGATG
TAGCTGGATTACAGCATCTTCATCCCCAGTAGGTACTTGGACCATCCACAGCCAGCAAGGCAGAGCAGGATGCTT
CTATTCTCTCTGGCACCCATGAGGCCCTGCTTCAGACAGCCCTTTCTCTCTCTCTCTCTCCACCAGGCCCTGTGT
CTCTCTCCCCAAAAGGCAAAAGAGGCACCAACACCCAAGCCAGCCCATCTCTGATGATGAAGCCAGTGATGGGG
AAGAAACCCAGGTTAGTGCAGCTGATCTGGAAGCCCTCATCAGTGGCCACTACCCACCTCCCTTGAGGGAGATT
GTGAGCCTAGCCCAGCCCTGCTGTCTTGATAAGTGGGTCTGTGCACAGCCCTCAAGCCAGAAGGCGACCAATC
ACAACCTCCATATCACAGAGAAGCTGGAAGTTCTGGCCAAAGCCTACAGTGTTTCAGGGAGACAAGTGAGGGGCCC
TGGGCTATGCCAAGGCCATCAATGCCCTCAAGAGCTTCCATAAGCCTGTACCTCGTACCAGGAGGCCCTGCAGTA
TCCCTGGGATTGGGAAGCGGATGGCTGAGAAAATCATAGAGATCCTGGAGAGCGGGCATTTCGGGAAGCTGGACC
ATATCAGTGAGAGCGTGCTGTCTTGGAGCTCTTCTCCAACATCTGGGGAGCTGGGACCAAGACTGCCAGATGT
GGTACCAACAGGGCTTCCGAAGTCTGGAAGACATCCGCAGCCAGGCCCTCCCTGACAACCCAGCAGGCCATCGGCC
TGAAGCATTACAGTGAATCTCTGGAACGTATGCCAGGGAGGAGGCTACAGAGATTGAGCAGACAGTCCAGAAAG
CAGCCCAGGCCCTTAACTCTGGGCTGCTGTGTGTGGCATGTGGTTTCATACCGACGGGGAAAGGCGACCTGTGGTG
ATGTGACGTGCTCATCACTCACCCAGATGGCCGGTCCCACCGGGGTATCTTCAGCCGCTCCTTGACAGTCTTC
GGCAGGAAGGGTTCCCTCACAGATGACTTGGTGAGCCAAGAGGAGAATGGTCAGCAACAGAAGTACTTGGGGGTGT
GCCGGCTCCCAGGGCCAGGGCGGGCGGCACCGGCGCCTGGACATCATCGTGGTGCCCTATAGCGAGTTTGCCTGTG
CCCTGCTCTACTTCACCGGCTCTGCACACTTCAACCGCTCCATGCGAGCCCTGGCCAAAACCAAGGGCATGAGTC
TGTCAGAACATGCCCTCAGCACTGCTGTGGTCCGGAACACCCATGGCTGCAAGGTGGGGCTGGCCGAGTGCTGC
CCACTCCCCTGAGAAGGATGTCTTCAGGCTCTTAGGCCTCCCCTACCGAGAACCCTGCTGAGCGGGACTGGTGA
CCATGGCTGGGGGTGCTGAGGAGAGCCGAGTTGGACTGGCTACCCCTCCTGGCCACCCAGTACTCCCTCCAGCCT
CAGCTGGCTGAACCTCGCCGCTCCAACCACAGCTTCTCAGCGAGCAGGGCCAGGGCTCTGGGCCTGAAGCAA
GAGCCAGCCCGGCTCCCAGTGTCTGCCCCGCTCCCAGTGTCTGCCCAGCCCTCTCCCAGACAGGAGCAGGCTGCC
ACCCCTTCTACCTCACCACTGCCCCCTCGAAGAATTTTGCAAATGGCCCCTTGCCCCATTTTAAGCAGGAGCAGGT
GGCTGGTTTGAAGCCCCAGGTATCCCCCTTCCCTGCTATGGGAAAGGCCAAGCTGCTGGGTGGGGACAGAAGCTG
CAGGGGAGAGGGAAGCAGCCGTGCTGTCAACATCATCCGGCACCCCTCTGGGGTAGGAGAACAGCCATTCCACATG
TGTTCCCTCTATCCGTCTGCTTCTGCGGAGCTGGTGGTGTGGGAATGGGGTGCCCCAGCCTTGGTGAGGACA
GTGTTGGGAGGCCCCAGGGGCCAGTAAAGTGCATTTGACATTGAAAAAAAAA

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FIGURE 3038

MDPRGILKAFPKRQKIHADASSKVLAKIPRREEGEEAEWLSSSLRAHVVRTGIGRARAELFEKQIVQHGGQLCPA
QGPVTHIVVDEGMDYERALLRLPQLPPGAQLVKSALSLCLQERRLVDVAGFSIFIPSRYLDHPQPSKAEQD
ASIPPGTHEALLQTALSPPPPTTRPVSPFQAKEAPNTQAQPI SDDEASDGEETQVSAADLEALISGHYPTSLEG
DCEPSPAPAVLDKVVCAQPSSQKATNHNH LITEKLEVLAKAYSVQGDKWALGYAKAINALKSFHKPVTSYQEAC
SIPGIGKRMAEKIIEILESGLRLKLDHISESVPVLELFSNIWGAGTKTAQMWYQQGFRSLEDIRSQASLTQQAI
GLKHYSDFLERMPREEATEIEQTVQKAAQAFNSGLLCVACGSYRRGKATCGDVDVLITHPDGRSHRGIFSRLLDS
LRQEGFLTDDLVSQEENGQQQKYLGVCRLLPGPGRHRRLDIIVVPYSEFACALLYFTGSAHFNRSMRALAKTKGM
SLSEHALSTAVVRNTHGCKVGPGRVLP TPTKDVFRLLGLPYREPAERDW

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FIGURE 3039

ATGCGGCGGGCGGCCGGGGAGGAGGAGGAGGAGGAGGAGGAGGCGGCTCGGGAGTCGGGCTGCCCCGCCCGGCCGCGGGG
CCTGCGCTCTGGCGCCTGCCGGAGGAGCTGCTGCTGCTCATCTGCTCCTACCTGGACATGCGGGCCCTCGGCCGC
CTGGCCCAGGTGTGCCGCTGGCTGCGGCGCTTACCAGCTGCGATCTGCTCTGGCGCCGGATAGCCCCGGGCCTCG
CTCAACTCCGGCTTCACGCGGCTCGGCACCGACCTGATGACCAGTGTCCAGTGAAGGAACGAGTGAAGGTGTCT
CAGAACTGGAGACTGGGGCGCTGCCGAGAGGGGATTCTGCTGAAGTGGAGATGCAGTCAGATGCCCTGGATGCAG
CTAGAGGATGATTCTCTGTACATATCCCAGGCTAATTTATCCTGGCCTACCAGTTCCGTCCAGATGGTGCCAGC
TTGAATCGTCGGCCTCTGGGAGTCTTTGCTGGGCATGATGAGGACGTTTGCCACTTTGTGCTGGCCAACTCGCAT
ATTGTTAGTGCAGGAGGGGATGGGAAGATTGGCATTCTATAAGATTACAGCACCTTCACTGTCAAGTACTCGGCT
CATGAACAGGAGGTGAACTGTGTGGATTGCAAAGGGGGCATCATTGTGAGTGGCTCCAGGGACAGGACGGCCAAG
GTGTGGCCTTTGGCCTCAGGCCGGCTGGGGCAGTGCTTACACACCATCCAGACTGAAGACCGAGTCTGGTCCATT
GCTATCAGCCCACTTACTCAGCTCTTTTGTGACAGGGACGGCTTGTGCGGGCACTTCTCACCCTGAGAATCTGG
GACCTCAACAGTGGGCAGCTGATGACACACTTGGGCAGTGACTTTCCCCCAGGGGCTGGGGTGCTGGATGTCATG
TATGAGTCCCCTTTACACTGCTGTCCTGTGGCTATGACACCTATGTTGCTACTGGGACCTCCGCACCAGCGTC
CGGAAATGTGTATGGAGTGGGAGGAGCCCCACGACAGCACCTGTACTGCCTGCAGACAGATGGCAACCACCTG
CTGGCCACAGGTTTCTCTACTACGGTGTGTACGGCTGTGGGACCGGCGTCAAAGGGCCTGCCTGCACGCCTTC
CCGCTGACGTCGACTCCCCTCAGCAGCCCTGTGTACTGCCTGCGTCTCACCACCAAGCATCTCTATGCTGCCCTG
TCTTACAACCTCCACGTCCTGGATTTTCAAACCCATTGA

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FIGURE 3040

MAAAAGEEEEEEAARESAARPAAGPALWRLPEELLLLICSYLDMRALGRLAQVCRWLRRFTSCDLLWRRIARAS
LNSGFTRLGTDLMTSVPVKERVKVSQNWRLGRCREGILLKWRCSQMPWMQLEDDSLYISQANFILAYQFRPDGAS
LNRRPLGVFAGHDEDVCHFVLANSIHVSAGGDGKIGIHKIHSTFTVKYSAHEQEVNCVDCKGGIIVSGSRDRTAK
VWPLASGRLGQCLHTIQTEDRVWSIAISPLLSSFVTGTACCGHFSPLRIWDLNSGQLMTHLGSDFPFGAGVLDVM
YESPFTLLSCGYDTYVRYWDLRTSVRKCVMEWEEPHDSTLYCLQTDGNHLLATGSSYYGVVRLWDRRQRACLHAF
PLTSTPLSSPVYCLRLTTKHLAALSYNLHVLDFOQP

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FIGURE 3041A

AGGCAGCAGCAGAGGGAGAGCTCGGGGCTTGGAGGGGAAACAGCGGAAGACCTAAGATTATCGGGAGGGCAGCAG
AGGCAGAGAACGAGGACAGGACCCTTGGCCGTCTTCTTCCAGGGAACGAGAGGTCACAGCCTCGCTCTCCGCTTA
GGCTTCTGGCGCCCCAGCTTAAAGCCGAGGCTGCGGCTGACAAAGGGCTCGCGCCGGTGCCGCCGCCCTTCTCAT
CCGGGCATTGCGGTCCCTGCGGAGAGGGAGGGGGAAGGGCAGAGGGGGAGGGGAAGGAGCCGGAGGGGCGCACAC
TTGGAGCTGAAGCCCTCTCCAGGGCTCCGGGCCGGTGCCCAACGGACAGAGGTCGAGGAGGACCCGCAGAGGTG
GCAGCGGCCCGGGGAGGAGGATGGTGCAAGGAGAGTCAAGCGACGTTGGAGGAGCGGGAGAGCGAGCTCAGC
TCCAACCCTGCCGCTCTGCGGGGCGATCGCTGGAGCCGCCGGCAGCTCCGGCACCCGGAGAAGACAACCCCGCC
GGGGCTGGGGGAGCGCGGTGGCCGGGGCTGCAGGAGGGGCTCGGCGGTTCTCTGCGGTGTGGTGAAGGATTT
TATGGAAGACCTTGGGTTATGGAACAGAGAAAAGAACTCTTTAGAAGGCTCCAGAAATGGGAATTAATACATAC
TTGTATGCCCCAAAAGATGACTACAAACATAGGATGTTTTGGCGAGAGATGTATTAGTGGAGGAAGCTGAGCAA
CTTATGACTCTCATCTCTGCTGCACGAGAATATGAGATAGAGTTTCTATGCGATCTCACCTGGATTGGATATC
ACTTTTTCTAACCCCAAGGAAGTATCCACATTGAAACGTAAATTGGACCAGGTTTCTCAGTTTGGGTGCAGATCA
TTTGCTTTGCTTTTGTATGATATAGACCATAATATGTGTGCAGCAGACAAAGAGGTATTAGTTCTTTTGCTCAT
GCCCCAAGTCTCCATCACAAATGAAATCTATCAGTACCTAGGAGAGCCAGAACTTTCTCTTCTGTCCCACAGAA
TACTGTGGCACTTTCTGTTATCCAAATGTGTCTCAGTCTCCATATTTAAGGACTGTGGGTGAAAAGCTTCTACCT
GGAATTGAAGTGCTTTGGACAGGTCCCAAAGTTGTTTCTAAAGAAATTCCAGTAGAGTCCATCGAAGAGGTTTCT
AAGATTATTAAGAGAGCTCCAGTAATCTGGGATAACATTTCATGCTAATGATTATGATCAGAAGAGACTGTTTCTG
GGCCCGTACAAAGGAAGATCCACAGAACTCATCCCACGGTTAAAGAGGAGTCCCTACTAATCCAAATTGTGAATTT
GAAGCCAACACGTTGCTATCCACACCCTTGCCACCTGGTACAAATCAAACATGAATGGAGTGAGAAAAGATGTA
GTGATGACTGACAGTGAAGATAGTACTGTGTCCATCCAGATAAAATTAGAAAATGAAGGCAGTGATGAAGATATT
GAACTGATGTACTCTATAGTCCACAGATGGCTCTAAAGCTAGCATTAAACAGAATGGTTGCAAGAGTTTGGTGTG
CCTCATCAATACAGCAGTAGGCAAGTTGCACACAGTGGAGCTAAAGCAAGTGTAGTTGATGGGACTCCTTTAGTT
GCAGCACCTCTTTAAATGCCACAACCGTAGTAACAACAGTTTATCAGGAGCCCATATAGAGCCAGGGAGCAGCC
TTGAGTGGTGAGCCTACTACTCTGACCAAGGAAGAAGAAAAGAAAAGCAGCCTGATGAAGAACCCATGGACATGGTG
GTGGAAGAAACAAGAAGAAACGGACCACAAGAATGACAATCAAATACTGAGTGAAATTGTTGAAGCGAAAATGGCA
GAGGAATTGAAACCAATGGCACTGATAAAGAGAGCATAGCTGAATCAAATCCCCAGAGATGTCCATGCAAGAA
GATTGTATTAGTGACATTGCCCCCATGCAAACTGATGAACAGACAAACAAGGAGCAGTTTGTGCCAGGTCCAAAT
GAAAAGCCTTTGTACACTGCGGAACCAAGTGACCCTGGAGGATTTGCAGTTACTTGTCTGATCTATTCTACCTTCCT
TACGAGCATGGACCCAAAGGAGCACAGATGTTACGGGAATTTCAATGGCTTCGAGCAAATAGTAGTGTGTGTCAGT
GTCAATTGCAAGGAAAAGACTCTGAAAAAATTGAAGAAATGGCGGTACGAGCAGCCAAGTTTGAAGAGATGTGT
GGACTAGTGATGGGAATGTTCACTCGGCTCTCCAATTGTGCCAACAGGACAATTCTTTATGACATGTACTCCTAT
GTTTGGGATATCAAGAGTATAATGTCTATGGTGAAGTCTTTGTACAGTGGTTAGGGTGTGCTAGTCATTCTTCA
GCACAATTCTTAATTGGAGACCAAGAACCCTGGGCCCTTTAGAGGTGGTCTAGCAGGAGAGTTCCAGCGTTTGCTG
CCAATTGATGGGGCAAATGATCTCTTTTTTCAGCCACCTCCACTGACTCCTACCTCCAAAGTTTATACTATCAGA
CCTTATTTTCTTAAGGATGAGGCATCCGTGTACAAGATTTGCAGAGAAATGTATGACGATGGAGTGGGTTTACCC
TTTCAAAGTCAGCCTGATCTTATTGGAGACAAGTTAGTAGGAGGGCTGCTTTCCCTCAGCCTGGATTACTGCTTT
GTCCTAGAAGATGAAGATGGCATATGTGGTTATGCCTTGGGCACTGTAGATGTGACCCCTTTATTAAAAAATGT
AAAATTTCTGGATCCCTTTCATGCAGGAGAAGTATACCAAGCCAAATGGTGACAAGGAACCTCTCTGAGGCTGAG
AAAATAATGTTGAGTTTCCATGAAGAACAGGAAGTACTGCCAGAACTTTCCTTGCTAATTTCCCTTCTCTGATA
AAGATGGACATTACAAAAAAGTAACTGACCCAAGTGTGGCCAAAAGCATGATGGCTTGCCCTCTGTCTTCACTG
AAGGCTAATGGCTCCCGGGGAGCTTTCTGTGAAGTGAGACCAGATGATAAAAGAATTCTGGAATTTTACAGCAAG
TTAGGATGTTTTGAAATTGCAAAAATGGAAGGATTTCCAAAGGATGTGGTTATACTTGGTGGAGCCTGTGACAT
TTGTTGACACTGTGAAGTGTCCAAAAGTCTCTTAAGTCAACCTTGTGAATGGTAGTTGAGGTCTTCATACAGTTC
AGCCTCTAGAATGGTAACAAATCAGCCAATTGGATTGCAAAACAAAGAAGACTATGTAAGTCAACCCATCACACT
TTGAGACTACTCACTGGTTGGAAGAATATAGTATTGCAGCAAACTCCTGTATGAAAGAGAGATGTGGGCTTCCTTT
TTGAGTCTTGTGTTAGGTGCTGAGACCTTTTACATGGGCTTATACAGGGAGAGAGTCTTCAATAAATGTAGTCAG
CACTATTTTCTGCATCCAGTGTGGTTGCGTTTTCTCACCTGAGAGTAATCAAGATAACATCTGTCTCTTCTTGG
TTTATTGAGTGAAATGCCTCTCAGTCTTAGGGGACATGGCAGAGATGAAAGAAAAGAAAGAGTGGGTTTCAGAAGT

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FIGURE 3041B

GTCAGGGTGGAGTGATTCCAAGTGGGATGGTTGTGGCATTAGTTTAAGCTGAATAAATAATTTCAATTTGGGGCA
GTTATTCTGCTTTTTGTAAAGCCGTGGCCAATTGTCTCCTGTAATGACTGTTGGTTCAGGCATGTTGTACTTTGT
AGGGACAAATGTGCATTTGTTTGTGGCAAAGCCTACAATTGACAACTTGTAATTTCTTTGTATATAAACTAG
CTGTAACCTGACTATCCTTTGTGTTTACTGTTTTTGTAAATTTTTTCTCTATAAAATGAAAGGGTGTGGTTCA
GAATGGCACTTTGAATAATGTAAACAGTGAAAAGTGGATTTTCTTTACTTTTGTCTTTGGGTTTGGGGTTGTTT
TTGTTCTTTTTGAAGTTTTATTATTTTTAAAGTGCCTCCCACCTAGGCGTAGGCCATGACCATTGTTGGGTACGAG
AGCCTAATTTTGTAGGACTTAATCTGTTGAAAAGTGCAGTTACTTCTGGAAATTAACCTCAATATTAGGTCAGCA
TGTGAAATGTTGGATTTGACATGTCAGGTAGGGTTTCAAGGACTGATTGGTCCCATTTGCCCTCAGGTCAGTTGTT
TAATCTCAAGACCTGTTACTACTGATTTTATTAAATCAGAGTCTTTAATTCTTGCATGTTTGTATCTAATTTCTG
AATGAATGAGCACACTTTAACCAGTTATTTACAGTTACCTTTTTCTTTAACCGGATTGTGAAAGCTTCATGTAT
TTTAATTTAGATTCTGTGTTTTTAAGGGTTCTGAGCATGAAGCTGGCAGATAGTCGGCAGGACTCATTTTTTCAT
CATGGCTGGCTGATTTCTCCATAGATTGATAACAGTATTTTGTTATCTTGCTTCTCTGTAGTTTTGCATCAGCTG
TTTAACTTTGAGCTGAGTGAGGGGAGAGGGGTAAAGAGAAAGAACTTAAGTTTTCTTTCACAGAACTCCACCAT
TGTGGGCTTTGAGAGAGCCCTAAAGCATTGTACCTAGTGGTACCTAGTGACTTCCAACCAAAGCCTTTGAGTATG
CACTAAATAGGTGAGAAGAAAGGAGAGAAGTTTTTAGGTTAGAAACCTTTAACCGATAGAAGGATATGGTATGT
TGTAAGCTGGAACCAAGTTTGCATTTTTGAGGGCTTGAGATGAAGGAAGACTCTTACCAGATAGTAAGACAGC
TGAGTTTTCTCAGTTTTCTCGTCTTAACACTAGTGGACAATTCTAGCATTTTGTGTTGGAGGATTCAGAGTTAA
CCTCATGGAATTCAGGATTTTTTAGCAAGTTTGCTTTTGGTTTTATCTTGGCTTTTAGTAATCATGTTGGCTGGT
CTGGTCACAGGTGACTGTGAAACAGATGCCCTGGTCTTGCTTTTCATCACTCTAGGATCATGAAGTGCTATGCTAT
TTCTGTTTATGAATATTAAGGTTGGAATTACATTTTTATTGATTGTTTGGATCAGAGCTCAGTTCCTGTAGAAA
ACGAAGTGAAAAGACCATGCAAGAGGCAAAATAAACTTGAAGTG

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FIGURE 3042A

GCCAGCGATCAGAGCAGCGCTGGGTGTTCAGGGGCCAAGATGGCGGCGCGCCGGGGACGGAGAGACGGAGTCGCG
CCGCCCCCGAGTGGGGGCCCCGGTCCGGACCCTGGCGGGGAGCCCGCGCAGTGGTTGGCGAAGTCGAAGCCAA
GCGCCGTATGGGACTTTGGGCGCTGTGAGCGGCGGCGAGCAGGTGCTGCTGCATGAGGAGGCGGGTGATTCTGGC
TTTGTCACTCTCTCGGCAGGGCCCATCTCTGAGGGACAAGGACCTGGAAATGGAGGAGCTAATGCTGCAGGAT
GAGACACTGCTGGGGACCATGCAGAGCTACATGGATGCCTCCCTTATCTCCCTCATTGAGGATTTTGGGAGCCTT
GGAGAGAGCAGGTTATCTCTGGAGGACCACAATGAAGTGTGCTGCTCACGGCTCTGACGGAGATCTTGGACAAT
GCAGATTCTGAGAACCTTTCTCCATTTGACAGCATTCTGATTGCGAGCTGCTTGTGTACCCCGGGAGGGCTCC
TCTCTGCACAAGCTGCTTACTCTCTCTCGGACACCCCCAGAAGCTGACCTCATCACCCAGTTGACCCACTGGGG
CCCAGTACGGGCAGCAGTAGAGGGAGTGGGGTTGAATGTCTCTTCCAGATCCCTCTTGGGACTTCTCCCCACCC
TCTTTCTTAGAGACCTCTTCCCCAAGCTTCTAGCTGGAGACCCCCAAGATCAAGACCACGCTGGGGCCAAATCC
CCACCTCCCCAGCAGCGCAGTGATGGAGAAGAAGAGGAGGAGGTGGCCAGCTTCAGTGGCCAGATTCTTGCCGGG
GAGCTTGACAACCTGTGTGAGCAGTATCCCGGACTTCCCCATGCATTTGGCCTGCCCTGAGGAGGAAGATAAAGCA
ACAGCAGCAGAGATGGCAGTGCCAGCAGCTGGTGATGAGAGCATCTCCTCCCTGAGTGAGCTGGTGC GGCGCCATG
CACCCATACTGCCTGCCCAACCTCACCCACCTGGCATCACTTGAGGATGAGCTTCAGGAGCAGCCAGATGATTTG
ACACTGCCTGAGGGCTGCGTAGTGCTGGAGATTGTGGGGCAGGCAGCCACAGCTGGCGATGACCTGGAGATCCCA
GTTGTGGTGCGACAGGTCTCTCCTGGACCCCGGCCTGTGCTCCTGGATGACTCGCTAGAGACTAGTTCTGCCTTG
CAGCTGCTTATGCCTACACTGGAGTCAGAGACAGAGGCTGCTGTGCCCAAGGTAACCCCTCTGCTCTGAGAAAGAG
GGGTTGTCAATTGAACCTCAGAGGAGAAGCTGGACTCAGCCTGCTTATTGAAGCCAGGGAGGTGCTGGAGCCGGTG
GTGCCCAAGGAGCCTCAGAACCCACCTGCCAATGCAGCACCAGGTTCCCAAGAGAGCTCGAAAGGGCAGGAAGAAG
AAGAGCAAGGAGCAGCCAGCAGCCTGTGTGGAAGGCTATGCCAGGAGGCTGAGGTCATCTTCTCGCGGGCAGTCT
ACTGTAGGTACAGAAGTGACCTCTCAGGTAGACAACCTTGCAAAACAGCCTCAGGAAGAAGTTCAAAAAGAGTCT
GGGCCTCTCCAGGGTAAGGGGAAGCCCCGGGCTTGGGCTCGGGCCTGGGCAGCTGCCTTGGAGAATTCTAGCCCT
AAGAAGTTGGAGAGAAGTGCTGGACAAAGTAGTCTGCTAAAGAAGGCCCTCTAGACCTCTACCCAAAGCTGGCT
GACACTATCCAAACCAATCCTATACCAACCCATCTCTCATTGGTCGACTCTGCCCAAGCCAGCCCCATGCCAGTT
GACTCTGTTGAAGCTGATCCCACTGCAGTTGGCCCTGTTCTAGCTGGCCCTGTACCTGTTGACCCCTGGGTTGGTT
GACCTTGCTTCAACCAGCTCAGAAGTGGTTGAGCCTCTCCCGGCTGAGCCAGTGCTGATCAACCAGTCTCTGGCT
GACTCAGCAGCAGTTGACCCCTGCAGTGCTTCCCATCTCAGATAACTTGCCACCAGTTGATGCTGTCCCGTCTGGC
CCAGCACCAGTTGATCTAGCACTGGTTGACCCCTGTTTCTTAATGACCTGACTCCAGTTGACCCAGTGCTAGTTAAG
TCCAGACCAACTGATCCAGACGTGGTGAGTGTCATCAGCCCTGGGGGGTTGAGCAGCCAGCTCCTCGTGGAG
TCAGAGTCTTGGACCCACCAAGACCATCATCCCTGAAGTCAAAGAGGTTGTGGATTCTCTGAAAATTGAAAGT
GGTACCAGTGCTACAACCCATGAAGCCAGACCTCGGCCCTCAGCTTATCTGAGTACCGGCGACGAAGGCAGCAA
CGCCAAGCAGAAACAGAAGAGAGAAGTCCACAGCCCCCAACTGGGAAGTGGCCTAGCCTTCCAGAGACTCCCA
GGGCTGGCAGACATCCCTTGTCTTGTATCCACAGCCCCAGCCAAGAAGACAGCTCTGCAGAGAAGCCCTGAA
ACACCCCTTGAGATTTGCCTTGTGCTGTAGGTCCAGCCTCCTAGTCTTCCATTGTCTATGGGGCCAGTACTACCTGAT
CTGTGGCCTCATCTCCCACTGAGCAGGTGCCATCCAGGAGATGCCACTGTTGGCGAGACCTTCCCCTCCTGTG
CAGTCTGTGTCCCTGCTGTGCCCACCTCCCTCGATGTCTGCTGCCCTGCCTTTCCCTGCAGGTGGGCTTGGC
ATGCCCCCAGTCTGCCCCACCTCCCTTGACGCTCCTAGTCTTCCATTGTCTATGGGGCCAGTACTACCTGAT
CCGTTTACTCACTATGCCCCCTTGCCATCCTGGCCTTGTTATCCTCATGTGTCCCTTCTGGCTATCCTTGCCCTG
CCCCCCCCACCAACGGTGCCCTAGTGTCTGGTACTCCTGGTGCTATGCCGTGCCCTCCCACTTGAGTGTGCCT
TGGGCACCCCTCCTGCCCCAGTCTCACCTTACAGTTCCACATGTACCTATGGGCCCTTGGGATGGGGCCAGGG
CTCAACATAGTCTCCATTCTGCTACTGTTCCCCACCTCCTTGGCTCCAGCCTCCATTGGGAGAGCTGTTCCC
CAACCTAAAATGGAGTCTAGGGGCACTCCAGCTGGCCCTCCTGAAAATGTACTTCCCTTGTGATGGCTCCTCCC
CTCAGTCTTGGGCTACCTGGCCATGGAGCTCCTCAGACAGAGCCTACCAAGGTGGAGGTCAAGCCAGTGCTGCA
TCTCCCCATCCGAAACACAAGGTGTCTGCCCTGGTGCAAAGTCCCCAGATGAAGGCTCTAGCATGTGTGTCTGCT
GAAGGTGTGACTGTTGAGGAGCCTGCATCAGAGAGGCTAAAGCCTGAGACCCAAGAGACCAGGCCAGGGAGAAG
CCCCCTTGCCCTGCTACCAAGGCTGTTCCACACCAAGGCAGAGCACGTCCCCAAGCTGCCTGCTGTCCACCCA
GCCCCGTCTAAGGAAGCTGTCTTCTGCTACCCACGTAAGGTTCTGAAGATGTGGTACAGGCTTTCATC
AGTGAGATTGGAATTGAGGCATCGGACCTGTCCAGTCTGCTGGAGCAGTTTGAGAAATCAGAAGCCAAAAAGGAG

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FIGURE 3042B

TGTCCTCCTCCGGCTCCTGCTGACAGCTTGGCTGTAGGAACTCAGGCGGCGTTGACATTCCCCAGGAGAAGAGG
CCCCTAGACCGGTTACAAGCCCCAGAAGCTGGCCAACGTGGCAGGGGCTCACCCCTCCAGCTACCCCTCCCCACCAG
TTATGGAAGCCCCTGGCTGCTGTCTCACTGCTGGCCAAAGCCAAATCTCCTAAGTCCACCGCCCAGGAGGGAACC
CTGAAGCCTGAAGGAGTTACGGAGGCCAAACATCCAGCTGCAGTTCGCCTCCAAGAAGGGGTCCATGGCCCTAGT
CGAGTCCATGTGGGCTCTGGGGACCATGACTATTGTGTCCGGAGCAGGACCCCCCAAAAAAGATGCCTGCCCTA
GTCATTCCAGAGGTGGGCTCCCGATGGAATGTCAAGCGCCATCAGGACATCACCATCAAACCTGTCTTGTCTTG
GGCCAGCTGCCCTCCGCCCCATGCATAGCTGCCTCCCGGGAGCCGCTTGATCACAGGACTAGCAGTGAGCAG
GCAGATCCCTCAGCACCTGCCTTGCCCCATCCAGCTTGCTGTCCCTGAGGCCTCACCTGCCGGAATGACATG
AACACTAGGACTCCCCCTGAACCCTCAGCCAAGCAGCGGTCAATGCGCTGTTACCGAAAAGCCTGCAGGTCAGCC
AGCCCTCAAGCCAGGGCTGGCAGGGCCGCCGAGGCCGCAACAGCCGTTCTGTGAGCTCTGGGTCCAACCGGACT
AGCGAAGCATCTTCCTCATCTCATCATCGTCTTCCTCATCCCGATCTCGGTCCAGGTCCCTCTCCCCCCCCACAC
AAGAGGTGGCGAAGGTCCAGCTGTAGTTCTCTGGACGTTCTCGAAGATGCTCTTCCTCTTCTTCGTCATCATCT
TCCTCTTCGCTCTTCCTCATCTCATCATCCAGTTCTCGAAGCCGCTCACGATCCCCATCCCCCGCCGAGAGT
GACAGGAGGCGGCGGTACAGCTCTTATCGTTACATGACCATTACCAAAGGCAAAGAGTGCTACAAAAGGAGCGT
GCAATAGAAGAAAGAAGGGTGGTCTTCATTGGAAAGATACCTGGCCGCATGACTCGATCAGAGCTGAAACAGAGG
TTCTCCGTTTTTGGAGAGATTGAGGAGTGCACCATCCACTCCGTGTCCAAGGGGACAACCTACGGCTTCGTCACT
TATCGCTATGCTGAGGAGGCATTTGCAGCCATTGAGAGTGGCCACAAGCTGCGGCAGGCAGATGAGCAGCCCTTT
GATCTCTGCTTTGGGGGCCGAAGGCAGTTCTGCAAGAGGAGCTATTCTGATCTTGACTCCAACCGGGAAGACTTT
GACCCAGCACCTGTAAAGAGCAAATTTGATTCTCTTGACTTTGACACATTGTTGAAACAGGCCCAGAAGAACCTC
AGGAGGTAAACCTTGGGCCCTTCCCTGCTATCCTTTTTCTCCTTTGGAGGTGCCCCAACCTCCTCCACCCCTTCCC
CTACTCTAGGGGAGAGAGCTGCTAGTGAGATGACTGTTTTATAAAGAAATGGAAAAAAGTGAAATAAAAAATATG
TTGAATCAGATTTTTTAAAAGGGGTATTTGTTTTTTTATAACAGGTATTGAAACAAGTTAACTTGCAATTCCTATG
TAAGATAGGAGGGGCTGAGGGGATCCCCAGTGTGGAACATAAGTCACTATGCAGACTAATAAACATCACTAG
AGAGAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3043

MAARRGRRDGVAPPPSGGPGPDPGGGARGSGWRSRSQAPYGTLGAVSGGEQVLLHHEAGDSGFVSLSRQGPSLRD
KDLEMEELMLQDETLTGTMQSYMDASLISLIEDFGSLGESRSLSEDHNEVSLLTALTEILDNADSENLSPFDSIP
DSELLVSPREGSSLHKLLTLSTRTPPERDLITPVDPLGPGSTGSSRGSGVEMSLPDPSWDFSPPSFLETSSPKLPSW
RPPRSRPRWGQSPPPQQRSDGEEEEEEVASFSGQILAGELDNCVSSIPDFPMHLACPEEEDKATAAEMAVPAAGDE
SISSLSSELVRAMHPYCLPNLTHLASLEDELQEQPDDLTLPEGCVVLEIVGQAATAGDDLEIPVVVRQVSPGPRPV
LLDDSLLETSSALQLLMPTLESETEAAVPKVTLCSEKEGLSLNSEEKLDACLLKPREVVEPVVPKEPQNPPANAA
PGSQRARKGRKKKSKEQPAACVEGYARRLRSSSRGQSTVGTEVTSQVDNLQKQPQEELQKESGPLQGKGKPRAWA
RAWAAALENSSPKNLSAGQSSPAKEGPLDLYPKLADTIQTNPIPTHLSLVDSAQASPMFVDSVEADPTAVGPV
LAGPVVPDPLGLVDLASTSSELVEPLPAEPVLINPVLADSAAVDPAVVPISDNLPVDAVPSGPAPVDLALVDPVP
NDLTPVDPVLVKSRTDPRRGAVSSALGGSAPQLLVESESLDPPKTIIEVKEVVDLKIESTSATTHEARPRP
LSLSEYRRRRQQRQAETEERSQPPTGKWPSLPETPTGLADIPCLVIPPAPAKKTALQSPETPLEICLVPGPS
PASPSPEPPVSKPVASSPTEQVPSQEMPLLARPSPPVQSVSPAVPTPPSMSAALPFPAGGLGMPPSLPPPPLOPP
SLPLSMGPVLPDPFFTHYAPLPWPFCYPHVSPSGYPCLPPPPPTVPLVSGTPGAYAVPPTCSVPWAPPPAPVSPYSS
TCTYGPLGWGPGPQHAPFWSTVPPPLPPASIGRAVPQPKMESRGTPAGPPENVLPPLSMAPPLSLGLPGHGAPQT
EPTKVEVKPVPAASPHPKHKVSALVQSPQMKALACVSAEGVTVEEPASERLKPETQETRPREKPPPLPATKAVPTPR
QSTVPKLPVHPARLRKLSFLPTPRTQGSSEVVQAFISEIGIEASDLSSLEQFEKSEAKKECPPPAPADSLAVG
NSGGVDIPQEKRLDRLQAPELANVAGLTPPATPPHQLWKPLAAVSLAKAKSPKSTAQEGTLKPEGVTEAKHPA
AVRLQEGVHGPPSRVHVSGDHDYCVRSRTPPKMPALVIEVGSRWNVKRHQDITIKPVLSLGPAAPPPPCIAAS
REPLDHRTSSEQADPSAPCLAPSSLLSPEASPCRNDMNTRTPPEPSAKQSRMRCYRKACRSASPSSQGWQGRGR
NSRSVSSGSNRTSEASSSSSSSSSSSSRSRSRSLSPPHKRWRSSCSCSSGRSRRCSSSSSSSSSSSSSSSSSSSSR
SRSRSPSPRRSRDRRRYSSYRSHDHYQRQVQLQKERAIEERRVVFIGKIPGRMTRSELKQRFVVFGEIECTIH
FRVQGDNYGFVTYRYAEEFAAIESGHKLRQADEQPFDLFCGGRRQFCKRSYSDLDSNREDFDPAPVKSKFDSL
FDTLKQAQKNLRR

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FIGURE 3044A

GTCGTGCTGCGTCGACAACGGTAGTGACGCGTATTGCCTGGAGGATGGCGGACGCCGGCATTGCGCCGCTGGTTTC
CCAGCGACCTGTATCCCCTCGTGCTCGGCTTCCTGCGCGATAACCAACTCTCAGAGGTGGCCAATAAGTTTCGCCA
AAGCGACAGGAGCTACACAGCAGGATGCCAATGCCTCTTCCCTCTTAGACATCTATAGCTTCTGGCTCAAGTCTG
CCAAGGTCCCAGAGCGAAAGTTACAGGCAAATGGACCAGTGGCTAAGAAAAGCTAAGAAGAAGGCCTCATCCAGTG
ACAGTGAGGACAGCAGCGAGGAGGAGGAGGAAGTTCAAGGGCCTCCAGCAAAGAAGGCTGCTGTACCTGCCAAGC
GAGTCGGTCTGCCTCCTGGGAAGGCTGCAGCCAAAGCATCAGAGAGTAGCAGCAGTGAAGAGTCCAGTGATGATG
ATGATGAGGAGGACCAAAGAAGAACAGCCTGTCCAGAAGGGAGTTAAGCCCCAAGCCAAGGCAGCCAAAGCTCCTC
CTAAGAAGGCCAAGAGCTCTGATTCTGATTCTGACTCAAGCTCCGAGGATGAGCCACCAAAGAACCAGAAGCCAA
AGATAACACCTGTGACAGTTAAAGCTCAGACTAAAGCCCCCTCCCAAACCAGCTCGAGCAGCACCTAAAATAGCCA
ATGGTAAAGCAGCCAGTAGCAGCAGTAGCAGCAGCAGCAGCAGTAGCAGTGATGACTCAGAGGAGGAGAAGGCAG
CAGCCACCCCCAAGAAGGTCTGGACCATAACTTCTGTCAAGGCAGAGACTGTACCTAAAAAGCAAGTTGTGGCCA
AGGCCCCAGTGAAAGCAGCTACCACCCCTACCCGGAAGAGTTCTAGCAGTGAGGATTCTCCAGTGACGAGGAAG
AGGAGCAAAAAAACCCATGAAAAATAAACAGGTCCCTACAGTTTCACTCCCCCGCCTTCTGCTCCCCACCAA
AGAAGTCTCTGGGAACCCAGCCTCCCAAGAAGGCTGTGGAGAAGCAGCAGCCTGTGGAAAGCAGTGAAGACAGCA
GTGATGAGTCTGATTCAAGTTCTGAAGAAGAGAAGAAACCCCCAACTAAGGCAGTAGTCTCTAAAGCAACCACTA
AACCACCTCCAGCAAAGAAAGCAGCAGAGAGCTCTTCAGACAGCTCAGACTCTGACAGCTCTGAGGATGATGAAG
CTCCTTCTAAGCCAGCTGGTACCACCAAGAATTCTTCAAATAAGCCAGCTGTACCACCAAGTCACCTGCAGTGA
AGCCAGCTGCAGCCCCAAGCAACCTGTGGGCGGTGGCCAGAAGCTTCTGACGAGAAAGGCTGACAGCAGCTCCA
GTGAGGAAGAGAGCAGCTCCAGTGAGGAGGAGAAGACAAAGAAGATGGTGGCCACCCTAAGCCCAAGGCGACTG
CCAAAGCAGCTCTATCTCTGCCTGCCAAGCAGGCTCCTCAGGGTAGTAGGGACAGCAGCTCTGATTTCAGACAGCT
CCAGCAGTGAGGAGGAGGAAGAGAAGACATCTAAGTCTGCAGTTAAGAAGAAGCCACAGAAGGTAGCAGGAGGTG
CAGCCCCCTTCCAAGCCAGCCTCTGCAAAGAAAGGAAAGGCTGAGAGCAGCAACAGTTCTTCTTCTGATGACTCCA
GTGAGGAAGAGGAAGAGAAGCTCAAGGGCAAGGCTCTCCAAGACCACAAGCCCCAAGGCCAATGGCACCTCTG
CACTGACTGCCAGAATGGAAAAGCAGCTAAGAACAGTGAGGAGGAGGAAGAAGAAAAGAAAAGGCGGCAGTGG
TAGTTTCCAAATCAGGTTTCAATTAAGAAGCGGAAGCAGAATGAGGCTGCCAAGGAGGCAGAGACTCCTCAGGCCA
AGAAGATAAAGCTTCAGACCCCTAACACATTTCCAAAAAGGAAGAAAGGAGAAAAAAGGGCATCATCCCCATTCC
GAAGGGTCAGGGAGGAGGAAAATTGAGGTGGATTACAGAGTTGCGGACAACCTCTTTGATGCCAAGCGAGGTGCAG
CCGGAGACTGGGGAGAGCGAGCCAATCAGGTTTTGAAGTTACCAAAGGCAAGTCCTTTTCGGCATGAGAAAACCA
AGAAGAAGCGGGGAGCTACCGGGGAGGCTCAATCTCTGTCCAGGTCAATTCTATTAAAGTTTGACAGCGAGTGAC
CTGAGGCCATCTTCGGTGAAGCAAGGGTGATGATCGGAGACTACTTACTTTCTCCAGTGGACCTGGGAACCCCTCA
GGTCTCTAGGTGAGGGTCTTTGATGAGGACAGAAGTTTAGAGTAGGTCTTAAGACTTTTACAGTGTAAATCCTCTC
TGGTCCTTTTCTGTGTTCTTAGTTTTGTACAGACTTGTTTTTTGAGTGTGAGTAGCAGGGACAAAATAAGGGAAT
GTTATTTTTTAAGAAAATTCATTTTCATTGTTGTCTCCTTCTTTTTCTGTGAAAGTCTCATACTGAGAAATTTG
TATATTTTATATTAATCACTTACTATTGATTTTTGTTGTGATTTTTCAAAGGTGGATTCCCACAGATAAAATCTT
GGCTATTGCCCAAAACATAGTAAAGGGTCACGTGTGACTTTTTATAATAGGAAGAAAATCTGCCTTTGTGAGTG
CACATGTCCACATTTTATCCCTCCTTCCCTCAAAACCCTAGAGAGGGGCATTAAAGAATTGTTGATGTATATGCA
ATGCTGTAAAGCATGCACTATGTATTTTATCCTCATTTATTGGGTCTGGGACTGAAGTTTTTAGCCAGCATGGA
CCTAACCTACTTTTTGGGATAAAATCTCTGTTTTGTTACAGGCAAAATCTGGTATGGCGTGAATGCCATGGGT
CATCTGAATATATTTTTTCTGTAATTTTATCATTACACGATGTTTGCAATACGTGCTTTGTTTTTAAATTGA
AAGCAAACCTTTTCTACTGTTGAAAGACATTTTTTGACAACCTTGACCCTTCTAGTATTGAGTTCTAAGTTGAGGA
CTGCATCTTCTCGTTTTTTACAGTATAGAGAACAAAATGACATGAGTTTGAAAAATACATATCACTTGGTATTGC
TGTCTTGGTTGCAGTGGTGATACAGAATTGGTTTTCAATTAATTCCTACATGGTTGAGAATCACTGATCAAGAAAGT
GGGGGGAAAAAAAACAAACGTTAAACCTCAATCCTCAGTAGGAAGGTAGATTACATTAGGTGAAATTATAGGTA
ATCTATGTATGTGCTAATGGGGTTGGAAAGAACCTTACAGAGCATATTACCTGATAAACTGGAGTGGGTTTGGGA
GAACAACTAATAGGATTATTGTGTCTCCTAGTTGGTACCTGGGAGCAATTGACATGCCCCCTTCAGAACCTTAA
CTGTTAGTAGCAGTGGCTGTAACAACACAAACAGTGACCAGAGATAACAGCTTTTAGGCCAAGCTGGCCTGACG
GTATGGCTGCAGGAAGTGACTGAGCAGTAGCGGTACTCAGCCAGACCAAGACGGAGAGGGAAGAGTCCACAGCTT
TCTGGAAGCTAAGGCATTCTGGTGGTAGAAAAGTGTGCCCAAGCCTTCATGGACGAGTTATAGGTCTTAAGATT

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FIGURE 3044B

AGTCTCCTCTTGTTTGGATTCCATACTTGCTAAATAACCTGATAATAACCTGGTTTTCCATGTAAGTGCCTCTAG
GAAGAAAATGTACTGTTTCATGCTGACACAGATATTTTCAGTCTGCATGGTAAAAGTTCTAAATCTTACTACAAAAT
AATAAACTGGCTGGTTTATAATGTG

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FIGURE 3045A

GACAGGGAAGGTACCCGGCTCTACTGCCCGTCCCGGACGACTCATCCTGGCGGACTGTGCAGTCCCACCCTGACT
TCAGCCTCAATTTCCAGGAAACAGGCTCCTTCTCTTCTCCCATCTGCTACCAGAGCCGGGAGAGCTGCTCGGAGA
CGCCTCCGGGGTGC GGCTGGACATGAGCAGCGGCTGCCGGTCTGGGACTAGGCCCCGCCATTTTGGATCCGCT
GACAGGTTTGCCAAGATGGTGGATAAGAATATTTACATCATTCAAGGGGAGATTAACTTTGGTTGGGGCCATC
AAACGAAATGCCCGATGGAGCACCCATACACCCTGGATGAAGAACGGGATCCTCTGCTGCATAGTTTCGGTCAT
CTAAAGGAGGTTTAAACAGTATAACAGAACTCTCAGAAATTGAGCCCAATGTATTCTTCGACCTTTTCTGGAA
GTGATTGCTCTGAAGATACCACTGGCCCTATCACTGGACTGGCACTCACCTCTGTCAACAAGTTCTGTCTAT
GCACTCATAGATCCCACCCATGAGGGCACAGCAGAGGGCATGGAGAACATGGCAGATGCTGTCAACCATGCTCGT
TTTGTGGGCACGGATCCTGCCAGTGATGAAGTTGTCTGTATGAAAATCCTTCAGGTTCTACGGACTCTGCTGCTA
ACCCAGTGGGTGCCACCTAACCAATGAATCTGTGTGTGAGATTATGCAGTCTTGCTTCCGGATCTGCTTTGAA
ATGAGGCTCAGTGAGTTATTGAGAAAATCCGCAGAGCACACTCTCGTAGACATGGTGCAGTGCTCTTCACAAGG
TTACCTCAGTTTAAAGAAGAACCAAGAATATGTGGGGACCAACATGAAGAAGCTGAAAATGAGAGCCGGAGGC
ATGAGTGATTTCATCCAAATGGAAGAAACAGAAGAGATCCCCTCGGCCCCACGCCATATGACCAAAAGTCACACCA
GGTTCAGAGCTGCCACTCCCAATGGAACACCTTATCATCTAACCTCACTGGTGGCATGCCCTTCATTGATGTG
CCCCTCCCCTCTCTCTGCAAGTTTCAAGCTGCCTCAGCAGTGGTCAGTCCCCTCTACAGACAGTGGCCTGGAA
TTCTCTCCCAAACCACTTCCAAGGAAGACCTTACTGATCTAGAGCAACCTGGCTCTCCAGGGTACAGCACAGCT
ACAGAGCCTGGAAGCAGTGAGCTAGGTGTTCCCGAGCAGCCTGACCTCCAGGAAGGGACCCATGTGGAAAAGTCC
CAGTCAGCATCTGTGGAGTCCATCCCTGAAGTGTTAGAGGAGTGACGTCCCCTGCCGACCACTCTGACTCTGCC
TCTGTCCATGACATGGATTACGTCAATCCCCGGGGCGTGCGCTTTACACAGTCCCTCCAGAAAGAAGGCACAGCT
TTGGTCCCCTATGGTCTTCCCTGCATCCGCGAGCTCTTCCGCTTCCCTCATCTCCCTCACCATCCACAGACCGC
CATACTCAGAGGTTATGATTACATGGGACTGCATTTGCTGACAGTGGCCCTTGAGTCAGCCCCCTGTAGCCAG
TGCCAGACCCCTCTTGGGCCTCATCAAGGATGAGATGTGCCGTCACTTATTCCAGCTACTCAGCATAGAGCGACTA
AACCTTTATGCTGCTTCCCTGCGAGTATGCTTCTCTACTGTTTGAGAGCATGCGAGAGCACCTCAAGTTCCAAATG
GAGATGTACATCAAAAAGCTTATGGAGATCATCACTGTGGAGAACCCCAAGATGCCTTATGAGATGAAGGAGATG
GCACTGGAGGCCATTGTGCAGCTCTGGCGCATCCCAGCTTTGTACAGAGCTCTACATCAACTATGATTGTGAC
TACTACTGTTCCAACCTCTTTGAGGAAGCTCACAAGCTGCTGTCCAAGAATGCCTTCCCTGTGTCTGGTCAACTC
TATACAACACACCTACTATCTCTTGATGCCCTATTGACAGTGATTGACAGCACCGAGGCCCACTGCCAGGCTAAA
GTCCTCAACAGCCTCACCCAGCAAGAGAAGAAGGAGACAGCCAGACCAAGCTGTGAGATAGTAGATGGCACCCGA
GAAGCTAGCAATACTGAGAGAAGTCCAGCGATGGGAAAGCTGTAGGCATGGCCTCAGACATCCCAGGCCTGCAT
CTGCCAGGTGGAGGGCGGCTGCCACCAGAACATGGGAAATCAGGATGCAGTGATCTGGAGGAAGCTGTTGACTCT
GGGGCTGACAAAAAGTTTGGCCGAAGCCACCCCGATTTTCTGTCTCCTGCCAGATCCACGGGAAGCTAATTGAA
ATTA AAAACAAAAGAAGCTGCTAATCACTGGCACAGAGCAGTTCAATCAGAAACCAAGAAGGGGATTTCAGTTT
CTGCAAGAGAAAGGCCTCCTCACCATCCCAATGGACAACACAGAGGTTGCTCAGTGGCTCCGAGAGAACCCTCGG
CTGGACAAGAAGATGATTGGAGAGTTTGTGAGTGACCGCAAAAACATTGACCTGTTGGAGAGCTTTGTGAGCACC
TTCAGTTTTTCAGGGTCTGCGACTGGACGAAGCCCTCCGCTCTACCTGGAAGCCTTCCGTTTGCTGGGGAAAGCA
CCAGTCATCCAGAGGTTGCTGGAGGCATTACAGAGCGTTGGATGAATTGTAATGGCTCCCCATTTGCCAATAGC
GATGCCTGCTTTTCCCTGGCCTATGCTGTCTCATGCTTAATACTGACCAGCACAAACCAATGTTTCGTAAACAG
AATGCACCCATGACCCTGGAGGAGTTTCGCAAAAATCTGAAAGGTGTGAATGGAGGCAAGGACTTTGAGCAAGAC
ATCCTGGAGGACATGTACCATGCCATCAAGAATGAGGAAATGTAATGCCCTGAGGAGCAGACAGGCTTGGTTCCG
GAGAACTATGTGTGGAATGTGCTGCTTCATCGAGGTGCCACCCCTGAGGGCATATTCTGCGTGTGCCTACTGCC
AGCTATGATCTTGACCTCTTACCATGACCTGGGGCCCCACTATTGCTGCTCTCTCTTATGTCTTTGACAAAAGC
CTTGAGGAGACAATCATCCAGAAAGCCATCTCAGGCTTCAGGAAGTGCGCCATGATCTCCGCCCCACTATGGCCTC
AGCGATGTGTTTGACAATCTCATCTCTCTATGCAAATTCACAGCTCTCAGCAGTGAGTCTATTGAGAACCTG
CCCAGTGATTTTGGAAGCAACCCTAAAGCCCATATTGCAGCCAAGACAGTATTCATTTGGCCCATCGTCATGGT
GACATCCTGCGGGAGGGCTGGAAGAATATCATGGAGGCCATGCTGCAGCTCTTCCGAGCCCACTACTGCCCAAG
GCTATGATAGAGGTAGAAGATTTCTGTGATCCCAATGGCAAGATCTCTCTACAGCGGGAAGAGACACCATCAAAC
CGAGGAGAGTCAACAGTGCTGAGCTTTGTGAGCTGGCTAACACTGAGTGGTCTCTGAGCAGTCTAGTGTTCGGGGC
CCATCCACTGAAAACCAAGAGGCCAAGAGAGTGGCCTTAGAGTGATATAAAGCAATGTGACCCAGAAAAAATGATC

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FIGURE 3045B

ACAGAAAGCAAGTTCCTCCAGCTGGAGTCACTACAGGAGCTCATGAAGGCTCTGGTCTCAGTGACACCAGATGAA
GAGACATATGATGAGGAAGATGCTGCTTTCTGCCTAGAGATGCTGCTAAGGATTGTGTTGGAGAACAGGGATCGT
GTGGGCTGTGTGTGGCAGACTGTTTCGAGACCATCTATACCACCTCTGTGTTTCAGGCACAAGATTTCTGCTTCCTT
GTGGAGCGGGCAGTGGTGGGGTTGCTACGCCTGGCCATTTCGGCTTCTCCGGAGAGAAGAGATCAGTGCTCAGGTG
CTGCTCTCCCTGCGCATTTTGTACTGATGAAGCCAGTGTGCTATCCCGAGTCAGCCACCAGGTTGCGTATGGG
CTCCATGAACCTCTGAAGACCAATGCAGCCAACATCCACTCAGGTGATGACTGGGCCACACTCTTCACACTGCTG
GAGTGATCGGCTCAGGTGTGAAGCCTCCAGCTGCTCTGCAGGCCACAGCCAGGGCAGATGCACCTGATGCCGGG
GCCCAGTCAGATAGTGAGCTCCCATCTACCATCAGAATGACGTGAGCCTGGATCGAGGGTACACTTCGGACTCA
GAGGTCTACACTGACCATGGCAGGCCGGGCAAGATACACCGATCAGCCACAGATGCCGATGTGGTCAACAGTGGT
TGGTTAGTGGTTGGGAAGGATGACGTTGATAACTCCAAGCCAGGGCCCAGCCGCCAGGCCCTTCACCCCTGATC
AATCAATACAGCCTAACAGTGGGACTGGATTTGGGGCCACACGACACTAAGTCTCTGCTTAAGTGTGTGGAAATCG
CTGTCCTTCATCGTGCGTGATGCTGCCCCACATCACACCTGACAACCTTTGAGCTCTGCGTCAAGACTCTCCGGATC
TTTGTGGAGGCCAGTCTGAATGGCGGATGCAAGTCCAGGAGAAACGTGGCAAGAGTCACAAATATGACAGCAAA
GGGAACCGCTTCAAGAAGAAATCCAAAGAGGGATCAATGCTTCGCCGGCCTCGAACCTCCAGCCAACATGCCTCT
CGGGGCGGGCAGAGTGATGATGATGAGGACGAAGGCGTGCTGCCAGCTACCATACGGTGTCTTTACAGGTGAGT
CAGGACTTGCTAGACCTGATGCACACCCTGCACACGCGGGCAGCCTCTATCTACAGCTCATGGGCGGAGGAGCAA
CGCCACCTGGAGACAGGTGGCCAGAAGATTGAAGCTGATTCTCGCACCTCTGGGGCCACTGCTGGTGCCCTTTA
CTGCAGGGTATTGCTGCTGTGCTGCGATGCCCGGCCAGGTACGGATGCAGGCACCTGACCTATCTGCAGCGA
GCACTACTTGATGATGATGCAAAAGCTAGATGCCCTGGAATGGGAGTCCTGTTTTAAACAAGGTGCTGTTTCCT
CTACTTACCAAGCTCTTGAGAACATCAGCCCTGCAGATGTGGGTGGGATGGAGGAGACCCGGATGAGGGCTTCC
ACATTGCTCTCTAAGGTCTTCTGTCAGCACCTGTCTCCACTGCTGTCACTCTCTACCTTTGCGGCCCTCTGGCTC
ACCATCTTGGAATTCATGGACAAGTACATGCACGCAGGCTCCAGCGACTTACTGTGAGAGGCGATCCCTGAGTCT
CTGAAGAACATGCTTCTGGTGATGGACACAGCGGAGATTTTCCACAGTGCAGATGCACGGGGAGGCGGCCCTCG
GCCCTCTGGGAGATCACCTGGGAACGCATTGACTGTTTTCTCCCTCACCTACGAGATGAACCTTTCAAGCAGACC
GTCATCCAGGACCCCATGCCCATGGAGCCTCAAGGCCAAAAGCCTCTCGCCTCAGCCCACCTGACTTCCGCTGCT
GGCGACACTAGGACACCTGGCCATCCACCGCCCCCAGAGATTCCATCTGAGCTGGGGGCTGTGACTTTGAGAAG
CCCGAGAGCCCCGAGCCGCCAGCAGCTCCCCAGGATCACCAGTGGCCTCAAGCCCCAGCAGGCTGAGCCCC
ACCCCCGACGGGCTCCACCTTGGCTCAGCCCCCACTGATCCTGCAGCCCTTGGCCTCCCCACTGCAGGTGGG
GTGCCACCTATGACTCTGCCCATCATCCTCAACCTGCGCTCATCGAGGCCACCTCACCAGTGCCCTCTGGCC
ACACCCGCCCCACAGATCCCATACCCACCTCTGAGGTCAACTAAGGCAGGTCACTCAGAGATCAGGACCAGTGC
TTCCACAGGCTTTTCTTGACCCCACTTCTGGCTGTCTGCGGGCCACAAGCTCTTCAGGCCAAGTCAGAGCTG
CTGTTGCTGCCACTTGATGGGGACCTGAAAAAGAGAAATGTTGATAGCCCCAGCTAAGACCCCAATCAGCTGTG
GGACCTTTTCTCTCTGCGCTCCATTCTGGGGGTTTCAGCCTGAGAGTGAACCTCAGCTGTATCTGCAGCCTC
TGCTCCAGCCCGGCAGCTCTGGGGAGGCATCCGTGTGCCGGCCCTGCAGTGCCTGCCACGGTCAGGCATTGAA
AACTAAGCCCAACCACTCTGCACTTTGTTTCCCACTCCCATAGCCCTGGGCCACCTCCTCCAGTTCTTCTCTT
TTACTAATTAGTTGGTCAGTTTGGAGAGTTGACTGGCACCATGGAGGGTAGGCAGGTGGGGGCTGGGTGGGGAC
TGCCACAGGAGCATGTACATATGAAAAACAGAACAGTGGACTTTTATGATATAATAAATGCTTAGTAC

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FIGURE 3046

MVDKNIYIIQGEINIVVGAIKRNARWSTHTPLDEERDPLLHSFGHLKEVLNSITELSEIEPNVFLRPFLEVIRSE
DTTGPITGLALTSVNKFLSYALIDPTHEGTAEGMENMADAVTHARFVGTDPASDEVVLMKILQVLRLLLLTPVGA
HLTNESVCEIMQSCFRICFEMRLSELLRKS AEHTLVDMVQLLFTRLPQFKEEPKNYVGTNMKKLKM RAGGMSDSS
KWKQKRSPRPPRHMTKVTPGSELPTPNGTTLSSNLTGGMPIFIDVPTPISSASSEAAASAVVSPSTDSGLEFSSQT
TSKEDLTDLEQPGSPGYSTATEPGSSELGVPEQPDLOEGTHVEKSQSASVESIPEVLEECS PADHSDSASVHDM
DYVNPRGVRFTQSSQKEGTALVPYGLPCIRELFRFLISLTNPHDRHNSEVMIHMGHLHLLTVALESAPVAQCQTLL
GLIKDEMCRHLFQLLSIERLNL YAASLRVCFLLFESMREHLKFQMEMYIKKLMEIITVENPKMPYEMKEMALEAI
VQLWRIPSFVTELYINYDCDYCSNLFEELTKLLSKNAFPVSGQLYTTLLSLDALLTVIDSTEAH CQAKVLNSL
TQQEKKETARP SCEIVDGTREASNTERTASDGKAVGMASDIPGLHLPGGGRLPPEH GKSGCSDLEEAVDSGADKK
FARKPPRFSCLLPDPRELIEIKNKKLLITGTEQFNQPKKGIQFLQEKGLLTIPMDNTEVAQWLRENPRLDKKM
IGEFVSDRKNIDLLESFVSTFSFQGLRLDEALRLYLEAFRLPGEAPVIQRLLEAFTERWMNCNGSPFANS DACFS
LAYAVIMLNTDQHNHNVRKQ NAPMTLEEFRKNLKG VNGGKDFEQDILED MYHAIKNEEIVMP EEQTGLVRENYVW
NVLLHRGATPEGIFLRVPTASYDLDFMTWTGPTIAALSYVFDKSLEETIIQK AISGFRKCAMISAHYGLSDVFD
NLIISLCKFTALSSESIENLPSVFGSNPKAHIAAKTVFHLAHRHGDILREGWKNIMEAMLQLFRAQLLPKAMIEV
EDFVDPNGKISLQREETPSNRGESTVLSFVSWLTLSGPEQSSVRGPSTENQEA KRVALECIKQCDPEKMITESKF
LQLES LQELMKALVSVTPDEETYDEEDAAFCLEMLLRIVLENRDRVGC VQTVRDHLYHLCVQAQDFCFLVERAV
VGLRLAIRLLRREEISAQVLLSLRILLMKPSVLSRVSHQVAYGLHELLKTNAANIHS GDDWATLFTLLECIGS
GVKPPAALQATARADAPDAGAQSDSELPSYHQNDVSLDRGYTSDSEVYTDHGRPGKIHR SATDADVNSGWL VVG
KDDVDNSKPGPSRPGPSPLINQYSLTVGLDLGPHDTKSLLKCVESLSFIVRDAAHITPDNFELCVKTLRIFVEAS
LNGGCKSQEKR GKSHKYDSKGNRFKKKSKEGSM LRRPRTSSQHASRGQSDDDEDEGV PASYHTVSLQVSQD LLD
LMHTLHTRAASIYSSWAEQRHLETGGQKIEADSR TLWAHCWCPLLQGIACLCCDARRQVRMQALTYLQRALLVH
DLQKLDAL EWESCFNKVLFPLLTKLLENISPADVGGMEETRMRASTLLSKVFLQHLSP LLSLSTFAALWLTILDF
MDKYM HAGSSDLLSEAIPE SLKNMLLVMDTAEIFHSADARGGGSALWEITWERIDCF LPHLRDELFKQTVIQDP
MPMEPQGGKPLASAHLSAAGDTRTPGHPPPPEIPSELGACDFEKPES PRAASSSSPGSPVASSPSRLSPTPDGP
PPLAQPP LILQPLASPLQGVPPMTLP IILNPALIEATSPVPLLATPRPTDPIPTSEVN

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FIGURE 3047

CTCGTTGGTGGGGCTGGGGGATGAGAGCTGCACCGCGCGGGACAAGTCGCCGGCGGGCGCCCGACGGAGCAGAAGA
GAGAGCATGGAGCTGGAGAGGATCGTCAGTGCAGCCCTCCTTGCCCTTGTCCAGACACACCTCCCGGAGGCCGAC
CTCAGTGGCTTGGATGAGGTCATCTTCTCCTATGTGCTTGGGGTCCCTGGAGGACCTGGGGCCCCTCGGGCCCCATCA
GAGGAGAACTTCGATATGGAGGCTTTCACTGAGATGATGGAGGCCTATGTGCCTGGCTTCGCCCACATCCCCAGG
GGCACAATAGGGGACATGATGCAGAAGCTCTCAGGGCAGCTGAGCGATGCCAGGAACAAAGAGAACCTGCAACCG
CAGAGCTCTGGTGTCCAAGGTCAGGTGCCCATCTCCCCAGAGCCCTGCAGCGGCCCCGAAATGCTCAAAGAAGAG
ACTAGGTCTTCGGCTGCTGCTGCTGCAGACACCCAAGATGAGGCAACTGGCGCTGAGGAGGAGCTTCTGCCAGGG
GTGGATGTACTCCTGGAGGTGTTCCCTACCTGTTTCGGTGGAGCAGGCCCAGTGGGTGCTGGCCAAAGCTCGGGGG
GACTTGGAAGAAGCTGTGCAGATGCTGGTAGAGGGAAAGGAAGAGGGGCCTGCAGCCTGGGAGGGCCCCAACCCAG
GACCTGCCCAGACGCCTCAGAGGCCCCCCAAAAGGATGAGCTGAAGTCCTTCATCCTGCAGAAGTACATGATGGTG
GATAGCGCATAGTATCAGAAGATTACCCGGCCCATGGCTCCCAAGGAGGCCCCCAAGAAGCTGATCCGATACATC
GACAACCAGGTAGTGAGCACCAAGGGGAGCGATTCAAAGATGTGCGGAACCCTGAGGCCGAGGAGATGAAGGCC
ACATACATCAACCTCAAGCCAGCCAGAAAGTACCGCTTCCATTGAGGCACTCGCCGGACTCTGCCCCAGCCTTCT
AGGCTCAGATCCCAGAGGGATGCAGGAGCCCTATACCCCTACACAGGGGCCCCCTAACTCCTGTCCCCCTTCTCT
ACTCCTTTGCTCCATAGTGTTAACCTACTCTCGGAGCTGCCTCCATGGGCACAGTAAAGGTGGCCCAAGGAAAAA
AAAAAAAAAAAAAAAAAAAAA

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FIGURE 3048

MELERIVSAALLAFVQTHLPEADLSGLDEVIFS YVLGVLEDLGPSGPSEENFDMEAFTEMMEAYVPGFAHIPRGT
IGDMMQKLSGQLSDARNKENLQPQSSGVQGQVPISPEPLQRPEMLKEETRSSAAAAADTQDEATGAEEELLPGVD
VLLEVFPTCSVEQAQWVLAKARGDLEEAVQMLVEGKEEGPAAWEGPNQDLPRRLRGPQKDELKSFILQKYMVDS
A

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FIGURE 3049

GCCTAGCGGGCGGACCCGGCTGGGCAGTTCCTTCCCCAGAAGGAGAGATTCTCTGCCATGGAGTCCTACGATGT
GATCGCCAACCAGCCTGTCGTGATCGACAACGGATCCGGTGTGATTAAAGCTGGTTTTGCTGGTGATCAGATCCC
CAAATACTGCTTTCCAAACTATGTGGGCCGACCCAAGCACGTTTCGTGTCATGGCAGGAGCCCTTGAAGGCGACAT
CTTCATTGGCCCCAAAGCTGAGGAGCACCGAGGGCTGCTTTCAATCCGCTATCCCATGGAGCATGGCATCGTCAA
GGATTGGAACGACATGGAACGCATTTGGCAATATGTCTATTCTAAGGACCAGCTGCAGACTTTCTCAGAGGAGCA
TCCTGTGCTCCTGACTGAGGCGCCTTTAAACCCACGAAAAACCGGGAACGAGCTGCCGAAGTTTTCTTCGAGAC
CTTCAATGTGCCCGCTCTTTTCATCTCCATGCAAGCTGTACTCAGCCTTTACGCTACAGGCAGGACCACAGGGGT
GGTGTCTGGATTCTGGGGATGGAGTCACCCATGCTGTGCCCATCTATGAGGGCTTTGCCATGCCCCACTCCATCAT
GCGCATCGACATCGCGGGCCGGGACGTCTCTCGCTTCCTGCGCCTCTACCTGCGTAAGGAGGGCTACGACTTCCA
CTCATCTCTGAGTTTGAGATTGTCAAGGCCATAAAAGAAAGAGCCTGTTACCTATCCATAAACCCCCAAAAGGA
TGAGACGCTAGAGACAGAGAAAGCTCAGTACTACCTGCCTGATGGCAGCACCATTGAGATTGGTCCTTCCCGATT
CCGGGCCCCCTGAGTTGCTCTTCAGGCCAGATTTGATTGGAGAGGAGAGTGAAGGCATCCACGAGGTCTGGTGTT
CGCCATTGAGAAGTCAGACATGGACCTGCGGCGCACGCTTTTCTTAACATTGTCCTCTCAGGAGGCTCTACCTT
GTTCAAAGTTTTTGGTGACAGGCTCCTGAGTGAAGTGAAGAACTAGCTCCAAAAGATGTGAAGATCAGGATATC
TGCACCTCAGGAGAGACTGTATTCCACGTGGATTGGGGCTCCATCCTTGCTCCCTGGACACCTTTAAGAAGAT
GTGGGTCTCCAAAAGGAATATGAGGAAGACGGTGCCCGATCCATCCACAGAAAAACCTTCTAATGTCGGGACAT
CATCTTCACCTCTCTCTGAAGTTAACTCCACTTTAAACTCGCTTCTTGAGTCGGAGTGTTTGCAGGAACTGC
CTGTGTGTGAGTGCGTGTGTGGATATGAGTGTGTGTGCACATGCGAGTGCCGTGTGGCCCTGGGACCTTGGGCCC
AGAAAGGACGATGAACCTACCTGCAGTGGTGATGGCTGAGGCTGGGGTTGACCACTAACTGGCTCCTGACAGGG
AAGAGCGCTGGCAGAGGCTGTGCTCCCTCCTCAGGTGGCTCTGGCTGGCTGTGGGGGACTCCGTTTACTACCAC
AGGGAGACAGAGGGAGGTAAGCCATCCCCCGGGAGACCTTGCTGCTGACCATCCTAGGCTGGGCTGGCCCCACCC
TCACCCCCACCCCCAGGGTGCCCTGAGGCCCCAGGCAGCTGCTGCCCTCCACTATCGATGCCTCCTGACTGCACAC
TGAGGACTGGGACTGGGGTTGAGTTCTGTCTGGTTTTGTTGCCATTTTGGTTTGGGAGGCTGGAAAAGCACCCCA
AGAGCTATTACAGAGACTGGAGTCAGGAGAGAGCAGGAGGCCCTCATGTTTACCAGGGAACAGGACCACACCGGC
CACTGGAGGAGGGCAGGAGCAGTCCTCACTCTGAATGGCTGCAGAGTTAATGTTCCCAGCCAGTCCCTTTTCGG
GGGCCTTGGGAGAGTTTTAAGGCACCTGCTGGTTCCAGGACCTCGCTTTCCATCTGTTCTTGTTGCAATGCCATCT
TCAAACCGTTTTATTATTGAAGTGTTTGTTCAGTTAGGGGCTGGAGAGAGGGAGCTTGCTGCCTCCTGCCTTGC
TACACTAATGTTTACAGCACCTAAGCTTAGCCTCCAGGGCCCCACCTCTCCCAGCTGATGGTGAGCTGACAGTGT
CCACAGGTTCCAGGACCATTTGAGATTGGAAGCTACACTCAAAGACACTCCCACCAGGCTCTTTCTCCCTTTTCC
TCTTGCTCACTGCCCTGGAATCAACAGGCTGGTTGCTGGTTAGATTTTCTGAAACAGGAGGTAAAATTTTTCTTT
GGCAGAGGCCCTTAAGCAAGGGAGGGGTGTTGGAGAGCCAGTGCCCTTAAGACTGGAGAAAGCTGCAATTTACCA
AGTTGCCTTTTGCCACTGTAGCTGACCAGGGGACTAGGTTGTAGAGGTGGGAAGGCCCCCTCTGGGCTGATCTTG
TGCCATTCTTGACCTTGACCTGCTTGGTTAAGGAGGGAGTGGGCCAGACCAGAGTGCCAGGAGCTAATGGAGCC
AGGCCTGACTCCTAGGAGTGGTCCAAAGGCCTTCAGCCTAGATGGTGAAAGCTGGGGCCAGCCTGTCTTACCAG
GCACCTCACCTGTGACACCAAGACCCACCCCAATCCAGACTTCACACAGTATTCTCCCCACGCCGTCTATG
ACCAAAGGCCCTGCCAGGTGTGGGCCACAGCAGCAGGTATGTGTGAAAGCAACGTAGCGCCCCGCGGACTGCAG
TGCGCTTAACCAACTCACCTCCCTTCTCTTAGCCCAAGCCTGTCCCTCGCACAGCCTCGCACAAACCACATTGCC
TGGTGGGGCCAGTGTAAGTAAAGTCGTTCCGATAGACACGTC

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FIGURE 3050

MESYDVIANQPVVIDNGSGVIKAGFAGDQIPKYCFPNYVGRPKHVRVMAGALEGDIFIGPKAEHRGLLSIRYPM
EHGIVKDWNMERIWQYVYSKDQLQTFSEHPVLLTEAPLNPRKNRERAAEVFFETFNVPALFISMQAVLSLYAT
GRTTGVLDSGDGVTHAVPIYEGFAMPHSIMRIDIAGRDVSRFLRLYLKKEGYDFHSSSEFEIVKAikeracyls
INPQKDETLETEKAQYYLPDGSTIEIGPSRFRAPELLFRPDLIGEESGIHEVLVFAIQSDMDLRRTLFSNIVL
SGGSTLFKGFGRLLSEVKKLAPKDVKIRISAPQERLYSTWIGGSILASLDTFKMWVSKKEYEEDGARS IHRKT
F

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FIGURE 3051A

CGCCGTGCGCAGGCGCGGAGCTAGACCTCGCTGCAGCCCCATCGCCTCGGGGAGTCTCACCCACCGAGTCCGCC
CGCTGGCCCGTCAGTGCTCTCCCCGTCGTTTGCCCTCTCCAGTTCCCCCAGTGCCTGCCCTACGCACCCCGATGG
CGGAGCTGCGGCCTAGCGGCGCCCCCGGCCCCACCGCGCCCCCGGCCCTGGCCCGACTGCCCCCCCGGCCCTCG
CTTCGCTCTTTCCCCCGGAGTGCACGCCATCTACGGAGAGTGCCGCCGCTTTACCCTGACCAGCGGAACCCGC
TCCAGGTTACCGCTATCGTCAAGTACTGGTTGGGTGGCCAGACCCCTTGGAATATGTTAGCATGTACAGGAATG
TGGGGAGCCCTTCTGCTAACATCCCCGAGCACTGGCACTACATCAGCTTCGGCCTGAGTGATCTCTATGGTGACA
ACAGAGTCCATGAGTTTACAGGAACAGATGGACCTAGTGGTTTTGGCTTTGAGTTGACCTTTCTGCTGAAGAGAG
AAACTGGGGAGTCTGCCCCACCAACATGGCCCGCAGAGTTAATGCAGGGCTTGGCACGATACGTGTTCCAGTCAG
AGAACACCTTCTGCAGTGGGGACCATGTGTCTGGCACAGCCCTTTGGATAACAGTGAGTCAAGAATTACAGCACA
TGCTGCTGCAGAGGACCCACAGATGCAGCCCGTGCAGACACCCCTTTGGGGTAGTTACCTTCTCCAGATCGTTG
GTGTCTGCACTGAAGAGCTACACTCAGCCAGCAGTGGAAACGGGCAGGGCATCCTGGAGCTGCTGCGGACAGTGC
CTATTGCTGGCGGCCCTGGCTGATAACTGCATGCGGAGGGGAGAGACCATATTTGAGATCGATCCACACCTGC
AAGAGAGAGTTGACAAAGGCATCGAGACAGATGGCTCCAACCTGAGTGGTGTGAGTGCCAAGTGTGCCTGGGATG
ACCTGAGCCGGCCCCCGAGGATGACGAGGACAGCCGGAGCATCTGCATCGGCACACAGCCCCGGCGACTCTCTG
GCAAAGACACAGAGCAGATCCGGGAGACCCCTGAGGAGAGGACTCGAGATCAACAGCAAACCTGTCTTCCACCAA
TCAACCCCTAGCGGCAGAATGGCCTCGCCACGACCGGGCCCCGAGCCGCAAAGACAGCCTGGAAAGTGACAGCT
CCACGGCCATCATTCCCCATGAGCTGATTGCGACGCGGCAGCTTGAGAGCGTACATCTGAAATTCAACCAGGAGT
CCGGAGCCCTCATTCTCTGCTTAAGGGGCGAGGCTCCTGCATGGACGGCACTTTACATATAAAGTATCACAG
GTGACATGGCCATCACGTTTGTCTCCACGGGAGTGGAAGGCGCCTTTGCCACTGAGGAGCATCCTTACGCGGCTC
ATGGACCTGGTTACAAATTCTGTTGACCGAAGAGTTTGTAGAGAAAATGTTGGAGGATTTAGAAGATTTGACTT
CTCCAGAGGAATTCAAACTTCCCAAAGAGTACAGCTGGCCTGAAAAGAAGCTGAAGGTCTCCATCCTGCCTGACG
TGGTGTTTCGACAGTCCGCTACACTAGCCTGGGCTGGGCCCTGCAGGGGCCAGCAGGGAGCCAGCTGCTCCCCAG
TGACTTCCAGTGTAACAGTTGTGTCAACGAGATCTCCACAAATAAAGGACAAGTGTGAGGAAGACTGCGCAGTG
CCACCCCGCAGCCAGTGGGGTGCCATGCACAGGCCACAGGCCCTCCACCTCACCTCCAGCTCAGGGGCCGCACC
CCGCCGCTGGCTAAGCCTTGTGACCCATCAGGCCAGTGAGTGGGCAAATGCGGACCCTCCCTGCCTGCAGCCTGC
ACAGATTCTGGTTTGAGGTTTGACTCTGGACCCTGGCTGTGCCCTTAGGTGGAGACAGCCCTCTTTCTCACCTAC
CCCCTGCCGCACAGCCCAGCAGGAGGGAGGCGGACAGCCAGATGCAGAGCGAGTGGATGCACTTCCCAGCTCATC
TCTGGAAGCCTTTGCTACTCAAGCTCCTCTGGCCGCGGAACAATTCTCTGATCATGTTTGGTTTTCTTCTTCT
TATTTTATTTTGTAGAAACCGGGTGGTATTTTATTGCTCTGCAAAGATGTCCAGAAGCCATGTATATAATGTTTT
TTAAACAGAACTTCATTCCCCGTTGAACCTTTCGCATTCTCTGACAGAGGCCCTAGGGCTGTATCTCTCCCTGGGCT
GCCACCAGAGAAGGTGCTTGGTGTTCGCCTGCCAGCCAGAGCCCTGGAGGAGCCGGCTGCACAGAGAGGCTTTT
CTTCCCAGCTGGGCTGATGGAGCCCGGGGAGGGGGAGAGTAGAGACACTCCCTTGTGCAGCTTTGAGCCTAGT
TTAGCTGGGGCCAGGGAGGGGTGCTACTGTTTTCAAGTGAATGGGTCTCAAAGACTTGGTGACCCAGCCTCAT
CTTCTAGGCCTTTTCCATCCAACCAGGCCTACCTGGGAGAGGGTGAGGTTTACACATCACACACCATCCCACT
GTCATTACAGGGCTGGGTCTCCAGCTCTGTAACCAGTCTGTCCCATTTCTCAGTCCCTGGGCCTCCAGCCTT
CAGGCTGTAGGGCTGCCCTTACTAAAATTGAAAAATCCACCTCTTAACATCTCTTTCACTTTGGTTTTGCTAACAC
TGCTCTCTGCTGCCCTCCATCCTCCCTGTATCCATTCTATGCCCTATCTTTCACTTCTCCACTCCTAATCCCTCTC
CTTTCTGGCATCCTGGCCTCTCGTGGTCTCAGCCCTCACCCAGTACTGCAGATCTCACAGTTTGCCTTCCA
GAAGCCAGCCTATCTCTAGCCCATGGTTTTGGAGTTCTCTCGGGTTATCTCCACGCCTGACCTGGAACCAGCA
AGCCCTTTCTGCTTCTTACCCCAACTCTAGGGATGGGACTGTTACAATACTTCAAGATCACTCTTTACACC
TCTTCAAAGCAAAGTCATGACAAATGCAGGGCTCCTCATTGCTTCCATCTGCTTCTGCTGCACACACAGGCACCAG
CAGGGATGCCACAGGAGTGCCACAGGGTGACAGGACTCCACTGATGAGAGATCCAGCCAAAGAGCTGCCCCAGG
GGTATGAGGGCACCAGCTGGGTCTCCAGGGAGCAGGAGTTGGACCTCCATGGAGCCACTAGGCCTGGCCTCCTC
TACACATCCCCAGGGCTATCTGGTTAATTCCATCAAGCTCAGAGTTAAAAGGCATATCAGCCTGGAGTATTTGGG
AGAGACTGGCTGCAGATCCCCGCCAGCCAAGATGCAAGCCACTCGGGACCTGATGTGCGCAGCTGTGCCCTCTACT
GCCCTGAGGACTTACCAGAGGGAGCCCTACTGGCCTTCCCCACCACAGCAGCCCTGCCTGTGAAGCTCTTGT
CTGACATTTACAGGCAGAGAGGTGCCATCAGTTTCGCCTCCATTCTTGGCACCATGACCAGCCTCTCCCTGAAC
TCTCTCTGCTCGGGACCTGCCTGAGGGCTCCCTGCTGCAGTTCCCGTACTTCCATCTGCTGGGTGCCTCCATC

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FIGURE 3051B

GT TGGT TGGG TGGG ATGGG CATT TTTCTGAGCTAAGCTTTGTCATTAGTTTGTGAAGCACCTGGTCAGCAACCT
GCCCCAGACCTGGAGGGTCTTTGTGGACTGAAGGTAGACACCAGCCAGCATGGTGGCCCTGTTCTGGGGGAGCAG
GGTAAGGCAGGAGGAAGTGGGTGAGCTCCGAGATGATGAGCACATGAAGCCTGTGGCCCCCTTCGTACCTGCAATA
TGTCAGGAGCCTCACGCTCACCCAAGATCCTGCAGGGGCCAGGCTCCATCTCACTGGCTCTGAGGGCAGGACAGG
GTATCACACATTTCTCACCAGGCCTCCTTTCTATGGGCATTGGTGCCTCCCAGAGGTTTCTTGGGCTGCTGGCT
GGTGAGAGAGGACCCTTAAAGAAGATCAAGCCAAGCTGACCTTGGACCCTGTCCAGCACAGCTTCTGGCACAGGA
TGCTTGGTGAATGTACCCCTTTCTTTCCCTCCCTGCAGCTCTGAGGGAGCCCCTGACCTTGTAGTGGGTGGAGGAG
GTAAGGGGCCTCCCTCCCTAAATCTGCCTCTTCTGCAAGCTACTTGGAGACTTGCCTAGTTGTACCCACCCCTCC
AGGTCCCTGGTGCTAGAGCTTCTGAGAAGGGCCTTTCCCTTTCTCTTTGCCTGCTATATAAGGCAGGCTCCTGT
GGCTCTGCTGGCTCAGTGTGGGCTGCAGGAGGACTGCAGACTCAGCTGCAATTCTGAGGGGGGTTTGGGAGGCTT
GTGCGAGGTCTCAGGCCTGTGTGGGGAGCTGGTGCCTCTTCCCTGCCCGTATCTTTCTCTTCCAAGGGCAGTGCTC
CAAGGCAGGACTGGAGAAGCCAAGGGGAGAGTCTAAAAGGGCTAGAGCATTTTTAAAAATAGACACAGGGTCTT
GGGACTGGGGTTTCGGATTGAGTTGCAAGCAGGGAGAAAACCTGAAGGTCGGTGCCCCATATGGGGCTGACCAGTA
GAGAATTTCTTTACTGTATTTTTGTGTCTGGTCTTCCCTTTCTGGCTTCTAGGACATCCATGCCAGGTGAGGTG
CCTGGGTCCCTGTTACAAGTCAGGAGCCCTGTAGGGAGACCCCTCCTTTTGTACAAGTACCTGAATGCTGCGACA
AGCAGATTTTTGTAAAATTTTATATTAGTTTTTAATGTCAGTGGCGACTCGGTTCCCTGGGGCTGCAGCCAGCCTG
GGACTTTTGTAGAATTTTTGGGTGACTCACTTAGATGTCGTTTCCTTCTTGCCCCCTCTTCCTCTCTGTAATCT
AAGTGCATTAAACATCTTTGCAG

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FIGURE 3052

MAELRPSGAPGPTAPPAPGPTAPPAPAFASLFPPGLHAIYGECRRLYPDQPNPLQVTAIVKYWLGGPDPLDYVSMYR
NVGSPSANIPEHWHYISFGLSDLYGDNRVHEFTGTDGPSGFGFELTFRLKRETGESAPPTWPAELMQGLARYVFQ
SENTFCSGDHVSWHSPLDNSESRIQHMLLTEDPQMOPVQTPFGVVTFLQIVGVCTEELHSAQQWNGQGILELLRT
VPIAGGPWLIIDMRRGETIFEIDPHLQERVVDKGIETDGSNLGVSAKCAWDDLSRPPEDDEDSRSICIGTQPRRL
SGKDEQIRETLRRGLEINSKPVLPPIPNQRQNGLAHDRAPSRKDSLESSTAIIPHELIRTRQLESVHLKFNQ
ESGALIPLCIRGRLLHGRHFTYKSITGDMAITFVSTGVEGAFATEEHPYAAHGPWLQILLTEEFVEKMLEDLEDL
TSPEEFKLPKEYSWPEKKLKVSILPDVVFDSPH

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FIGURE 3053

AGCAGCGGCGGGGCCCCGAGGGATTCTGAAGGAAGATTTCCATTAGGTAATTTGTTTAATCAGTGCAAGCGAAAT
TAAGGGAAAATCGATGTAGAAAATGAGCAGATACTGAATGTAAACCCTGCAGATCCTGATAACTTAAGTGACTCT
CTCTTTTCCGGTGATGAAGAAAATGCTGGGACTGAGGAAATAAAGAATGAAATAAATGGAAATTGGATTTAGCA
TCCTCCATTAAACGAAGCTAGAATTAATGCCAAGGCAAAAAGGCGACTAAGGAAAAACTCATCCCGGGACTCTGGC
AGAGGCGATTTCGGTCAGCGACAGTGGGAGTGACGCCCTTAGAAGTGGATTAAGTGTGCCAACCAGTCCAAAGGGA
AGGTTGCTGGATAGGCGATCCAGATCTGGGAAAGGAAGGGGACTACCAAAGAAAGGTGGTGCAGGAGGCAAAGGT
GTCTGGGGTACACCTGGACAGGTGTATGATGTGGAGGAGGTGGATGTGAAAGATCCTAACTATGATGATGACCAG
GAGAACTGTGTTTATGAACTGTAGTTTTGCCTTTGGATGAAAGGGCATTGAGAAGACTTTAACACCAATCATA
CAGGAATATTTTGAGCATGGAGATACTAATGAAGTTGCGGAAATGTTAAGAGATTTAAATCTTGGTGAAATGAAA
AGTGGAGTACCAGTGTGGCAGTATCCTTAGCATTGGAGGGGAAGGCTAGTCATAGAGAGATGACATCTAAGCTT
CTTTCTGACCTTTGTGGGACAGTAATGAGCACAACCTGATGTGGAAAAATCATTGATAAATTGTTGAAAGATCTA
CCTGAATTAGCACTGGATACTCCTAGAGCACCACAGTTGGTGGGCCAGTTTATTGCTAGAGCTGTTGGAGATGGA
ATTTTATGTAATACCTATATTGATAGTTACAAAGGAACCTGTAGATTGTGTGCAGGCTAGAGCTGCTCTGGATAAG
GCTACCGTGCTTCTGAGTATGTCTAAAGGTGGAAAGCGTAAAGATAGTGTGTGGGGCTCTGGAGGTGGGCAGCAA
TCTGTCAATCACCTTGTTAAAGAGATTGATATGCTGCTGAAAGAATATTTACTCTCTGGAGACATATCTGAAGCT
GAACATTGCCTTAAGGAACCTGGAAGTACCTCATTTTCACCATGAGCTTGTATATGAAGCTATTATAATGGTTTTA
GAGTCAACTGGAGAAAGTACATTTAAGATGATTTTGGATTTATTAAAGTCCCTTTGGAAGTCTTCTACCATTA
GTAGACCAAATGAAAAGAGGTTATGAGAGAATTTACAATGAAATTCGGACATTAATCTGGATGTCCACATTCA
TACTCTGTGCTGGAGCGGTTTGTAGAAGAATGTTTTAGGCTGGAATAATTTCCAAACAACCTCAGAGATCTTTGT
CCTTCAAGGGGCAGAAAGCGTTTTGTAAGCGAAGGAGATGGAGGTCGTCTTAAACCAGAGAGCTACTGAAATATAA
GAACTCTTGCACTCTTAGATGTTATAAAAAATATATATCTGAATTGTAAGAGTTGTTAGCACAAAGTTTTTTTTTT
TTTTTTTTTAAGCACTTGTTTTGGGTACAAGGCATTTCTGACATTTT

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FIGURE 3054

MDVENEQILNVNPADPDNLSDSLFSGDEENAGTEEIKNEINGNWISASSINEARINAKAKRRLRKNSSRDSGRGD
SVSDSGSDALRSGLTVPTSPKGRLLDRRSRSGKGRGLPKKGGAGGKGVWGTPGQVYDVEEVDVKDPNYDDDQENC
VYETVVLPLDERAFEKTLTPIIQEYFEHGDNEVAEMLRDLNLGEMKSGVPVLAVSLALEGKASHREMTSKLLSD
LCGTVMSTTDVEKSFDKLLKDLPELALDTPRAPQLVGQFIARAVGDGILCNTYIDSYKGTVDVCVQARAALDKATV
LLSMSKGGKRKDSVWGSGGGQQSVNHLVKEIDMLLKEYLLSGDISEAEHCLKELEVPHFHHELVYEAIMVLEST
GESTFKMILDLLKSLWKSSTITVDQMKRGYERIYNEIPDINLDVPHSYSVLERFVEECFQAGIISKQLRDLCP
SRGRKRFVSEGDGGRLKPESY

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FIGURE 3055

ATGCCTCCAAAGGTGACTTCAGAGCTGCTTCGGCAGCTGAGACAAGCCATGAGGAACTCTGAGTATGTGACCGAA
CCGATCCAGGCCTACATCATCCCATCGGGAGATGCTCATCAGAGTGAGTATATTGCTCCATGTGACTGTCGGCGG
GCTTTTGTCTCTGGATTGATGGCTCTGCGGGCACAGCCATCATCACAGAAGAGCATGCAGCCATGTGGACTGAC
GGGCGCTACTTTCTCCAGGCTGCCAAGCAAATGGACAGCAACTGGACACTTATGAAGATGGGTCTGAAGGACACA
CCAACTCAGGAAGACTGGCTGGTGAGTGTGCTTCCTGAAGGATCCAGGGTTGGTGTGGACCCCTTGATCATTCCCT
ACAGATTATTGGAAGAAAATGGCCAAAGTTCTGAGAAGTGCCGGCCATCACCTCATTCCCTGTCAAGGAGAACCTC
GTTGACAAAATCTGGACAGACCGTCTGAGCGCCCTTGCAAGCCTCTCCTCACACTGGGCCTGGATTACACAGGC
ATCTCCTGGAAGGACAAGGTTGCAGACCTTCGGTTGAAAATGGCTGAGAGGAACGTCATGTGGTTTGTGGTCACT
GCCCTGGATGAGATTGCGTGGCTATTTAATCTCCGAGGATCAGATGTGGAGCACAATCCAGTATTTTTCTCCTAC
GCAATCATAGGACTAGAGACGATCATGCTCTTCATTGATGGTGACCGCATAGACGCCCCCAGTGTGAAGGAGCAC
CTGCTTCTTGACTTGGGTCTGGAAGCCGAATACAGGATCCAGGTGCATCCCTACAAGTCCATCCTGAGCGAGCTC
AAGGCCCTGTGTGCTGACCTCTCCCCAAGGGAGAAGGTGTGGGTCACTGACAAGGCCAGCTATGCTGTGAGCGAG
ACCATCCCCAAGGACCACCGCTGCTGTATGCCTTACACCCCCATCTGCATCGCCAAAGCTGTGAAGAATTACGCT
GAGTCAGAAGGCATGAGGCCGGCTCACATTAAAGATGCTGTTGCTCTCTGTGAACCTCTTTAACTGGCTGGAGAAA
GAGGTTCCCAAAGGTGGTGTGACAGAGATCTCAGCTGCTGACAAAGCTGAGGAGTTTCGCAGGCAACAGGCAGAC
TTTGTGGACCTGAGCTTCCCAACAATTTCCAGTACGGGACCCAACGGCGCCATCATTCACTACGCGCCAGTCCCT
GAGACGAATAGGACCTTGTCCCTGGATGAGGTGTACCTTATTGACTCGGGTGCTCAATACAAGGATGGCACCACA
GATGTGACGCGGACAATGCATTTTGGGACCCCTACAGCCTACGAGAAGGAATGCTTCACATATGTCTCAAGGGC
CACATAGCTGTGAGTGCAGCCGTTTTCCCGACTGGAACCAAAGGTCACCTTCTTGACTCCTTTGCCCGTTTCAGCT
TTATGGGATTACAGGCCTAGATTACTTGCACGGGACTGGACATGGTGTGGGTCTTTTTTGAATGTCCATGAGGGT
CCTTGCGGCATCAGTTACAAAACATTCTCTGATGAGCCCTTGGAGGCAGGCATGATTGTCACTGATGAGCCCGG
TACTATGAAGATGGGGCTTTTGAATTGCAATTGAGAATGTTGTCCTTGTGGTTTCTGTGAAGACCAAGTATAAT
TTTAATAACCGGGGAAGCCTGACCTTTGAACCTTAACATTGGTTCCAATTCAGACCAAAATGATAGATGTGGAT
TCTCTTACAGACAAAGAGTGCAGTGGCTCAACAATTACCACCTGACCTGCAGGGATGTGATTGGGAAGGAATTG
CAGAAACAGGGCCGCCAGGAAGCTCTCGAGTGGCTCATCAGAGAGACGCAACCCATCTCCAACAGCATTAA

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FIGURE 3056

MPPKVTSELLRQLRQAMRNSEYVTEPIQAYIIPSGDAHQSEYIAPCDCRRAFVSGFDGSAGTAIITEEHAAMWTD
GRYFLQAAKQMDSNWTLMKMGLKDTPTQEDWLVSVLPEGSRVGVDP LIIPTDYWKMAKVLSAGHHLIPVKENL
VDKIWTDRPERPCKPLLTGLDYGISWKDKVADLRKMAERNVMWFVVTALDEIAWLFNLRGSDVEHNPVFFSY
AIIGLETIMLFIDGDRIDAPSVKEHLLDLGLEAEYRIQVHPYKSILSELKALCADLSPREKVWVSDKASYAVSE
TIPKDHRCMPYTPICIAKAVKNSAESEGMRAHIKDAVALCELFNWLEKEVPKGGVTEISAADKAEFFRRQQAD
FVDLSFPTISSTGPNGAIHYAPVPETNRTLSDLDEVYLIDSGAQYKDGTDDVTRTMHFGTPTAYEKECFTYVLKG
HIAVSAAVFPTGTKGHLLDSFARSALWDSGLDYLHGTGHGVGSFLNVHEGPCGISYKTFSDPELEAGMIVTDEPG
YYEDGAFGIRIENVVLVVPVKTKYNFNRRGSLTFEPLTLVPIQTKMIDVDSLTDKECDWLNNYHLTCRDVIGKEL
QKQGRQEALWLIRETQPI SKQH

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FIGURE 3057

CCGTCCAGAGACTGCTGAACCCCTATCCATCTGCTACCACCACCCACTCTGGACACAGAACATCCAGTCATGGAA
AAAAATGAGCTGGTTTCAGAAGGCCAAACTGGCTGAGCAGGCTGAGCAATATGATAACATGGCAGCCTGCATGAAG
TCTGTAACTGAGCAAGGAGCTGAATTATCCAATGAGGAGAGGAATCTTCTCTCAGTTGCTTATAAAAAATGTTGTA
GGAGCCCGTAGGTCATCTTGGAGGGTCATCTCAAGTATTGAACAAAAGACGGAAGGTGTTGAGAAAAAACAGCAG
ATGGCTCGAGAATACAGAGAGAAAATTGAGATGGAGCTAAGAGATATCTCCAATGATGTACTATCTCTTTTGGAA
AAGTTCTTGATCTCCAATGCTTCACAAGCAGAGAGCAAAGTCTTCTATTTGAAAAATGAAAGGAGATTACTACCGT
TACTTGGCTGAGGTTGCCGCTGGTGATGGCAAGAAAGGGATTGTGGGTCAGTCACAACAAGCATACCAAGAAGCT
TTTGAAATCAGCAAAAAGGAAATGCAACCAACACATACGTCTCAGACTGGGTCTGGCCCTTAACCTCTCTTGTCT
ATTATGAGATTCTGAACTCCCCAGATAAAGTCTGCTCTCTTGCAAAGATGGCTTTTGATGAAGGCATTGCTGAAC
TTGATACATTAAATGAAGAGTCATACAAAGACAGCACGCTAATAATGCAATTACCGAGAGACAACCTTGACATTGT
GGACACTGGATACCCAAGGAGACAAAGCTGAAGCAGGAGAAAGAGGGGAAAATTAACCGGCCTTCCAACCTTTGT
CTGCCTCTTTCTAAATTTACACAGTAGACCATTTGTCATCCATGGTGTCCACAAATGGTTTTTTGTTTACAAT
TTATGGCAGATGTGTGTTACTTTTATTTGAATTTCTATATTTCCCATGTGGTTTTTATGTTTAATATTAGGGGAG
TAGAGCCAGTTAACATTTAGGGAGTTATCTGTTTTATCTTTGAGGTGGCCAATATGGGGATGTGGAATTTTATA
CAAGTT

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FIGURE 3058A

AACATTTTTGAAAGATCACTCAGCTTTAACACACCTTGGCTGGGTCTGGATAAAAAAAGTGAGCACTGCAAAAT
TTCTAGAAGAAAACATCAGGAGAAGAAAGAGAGAGGGGGATTTATTCAAAGTTGTTTCCAATTCTTTCAAAACCT
CAAACCAGGTGGCTATGGTATGGATGTAACCAAGAAAAACAAACGAGATGGAAGTCAAGTCACTGAGAGAAATTGT
CACTGAAACAGTAACCACAAGACTTACATCCTTACCACCAAAAGGCGGGACCAGCAATGGCTATGCTAAAAACAGC
CTCTCTTGGTGGAGGGAGCCGGCTGGAGAAACAAAGCCTGACTCATGGCAGCAGCGGCTACATAAACTCAACTGG
AAGCACACGAGGCCATGCCTCCACCTCTAGTTACAGGAGGGCTCACTCACCTGCCTCCACTCTGCCCCAATCCCC
AGGCTCAACCTTTGAAAGGAAAACCTCACGTTACCCGCCATGCGTATGAAGGGAGCTCCAGTGGCAACTCTTCTCC
GGAGTACCCTCGGAAGGAATTTGCATCTTCTTCAACCAGAGGACGGAGTCAAACACGAGAGAGTGAAATTCGAGT
TCGACTGCAGAGTGCCTCCCCATCCACCCGATGGACAGAATTGGATGATGTTAAGCGTTTGCTCAAGGGGAGTCG
ATCGGCAAGTGTGAGCCCCACCCGGAATTCCTCCAACACACTCCCCATCCCCAAGAAAGGCAGTGTGGAGACCAA
AATTGTGACAGCGAGCTCCAGTGGTGTGAGGCACCTACGATGCAACGATCCTGGATGCCAACCTTCCCTCCCA
TGTGTGGTCTCCACCCTGCCGCGGGGTCTCCATGGGGACCTATCACAACAACATGACAACCCAGAGCTCATC
CCTCCTCAACACCAATGCCTACTCTGCGGGATCAGTCTTCGGAGTTCCAAACAACATGGCGTCTGCTACCCAC
TTTGACCCCTGGACTCAGCACATCCTCCTCAGTGTGTTGGCATGCAGAACATCTGGCCCCCAGCTTGACCACCCT
GTCCCATGGCACCACCACCCTTCCACAGCATATGGGGTGAAGAAAAACATGCCCCAGAGTCTGCGGCTGTGAA
CACTGGCGTTTCCACCTCCGCGCCTGCACCACAAGTGTGAGAGCGATGACCTTTTGACAAAGGACTGCAAGTT
CCTGATCCTAGAGAAAGACAACACACCTGCCAAGAAGGAGATGGAGCTGCTCATCATGACCAAGGACAGCGGGAA
GGTCTTTACAGCCTCCCTTGCCAGCATCGCTGCAACTTCTTTTTCAGAAGACACCCTAAAAAAGAAAAAGCAAGC
TGCTACAATGCTGACTCAGGCCTAAAAGCCGAAGCTAATGGAGACCTGAAGACTGTGTCCACAAAGGGCAAGAC
CACCCTGCAGATATCCACAGCTACGGCAGCAGTGGTGGTGGTGGCAGTGGAGGAGGTGGCGGTGTTGGTGGCGC
TGGCGGCGGCCCTTGGGGACCAGCGCCAGCCTGGTGGCCCTGCGGCTCCTGCTGCAGCTGGTGAAGTGGCTGCT
GGGCTGCTGCTCAGCTGGCTGCTACTCCTGGGGCTGCTCTTCGGCCTCATTGCTCTGGCGGAGGAGGTGAGGAA
GCTGAAGGCGCGTGTGGATGAGCTGGAGAGGATCAGGAGGAGCATACTGCCCTATGGGGACAGCATGGATAGAAT
AGAAAAGGACCGCCTCCAGGGCATGGCACCCGCGGGGAGCAGACCTGGACAAAATTGGGCTGCACAGTGACAG
CCAGGAGGAGCTCTGGATGTTCTGTGAGGAAGAAGCTAATGATGGAACAGGAAAATGGAAATCTCCGAGGAAGCCC
TGGCCCTAAAGGTGACATGGGAAGTCCAGGCCCTAAAGGAGATCGAGGGTTCCCTGGGACTCCAGGTATCCCTGG
GCCCTTGGGCCACCCAGGTCCACAAGGACCAAAGGTTCAAAAAGGCAGCGTGGGAGATCCTGGCATGGAAGGCCC
CATGGGCCAGAGAGGGGCGAGAAGGCCCCATGGGACCTCGTGGTGAGGCAGGGCTCCTGGATCTGGAGAGAAAGG
GGAAAGAGGGGCTGCTGGTGAACCAGGTCTCATGGCCACCTGGTGTCCAGGTTCTGTGGGTCCCAAAGGTTT
CAGCGGCTCTCTGGGCCACAGGGCCCTCCAGGTCTGTAGGTCTCCAAGGGCTCCGAGGTGAAGTAGGACTTCC
TGGTGTCAAAGGTGACAAAGGACCAATGGGACCACCAGGACCCAAAGGTGACCAGGGTGAGAAAGGACCTCGAGG
CCTCACAGGCGAGCCTGGCATGAGAGGTTTGCCTGGTGTGTTGGTGTAGCCCGGGGCTAAAGGAGCAATGGGTCC
TGCTGGCCACAGCGACACCAAGGCCCAAGAGGTGAACAAGGTCTTACTGGGATGCTGGAATCCGTGGCCCCACC
AGGACCTTCTGGAGACCCAGGAAAGCCAGGTCTCACAGGACCCAGGGACCTCAGGGACTTCCCGGTACCCCTGG
CCGACCAGGAATAAAAGGTGAACAGGAGCTCCAGGCAAGATCGTGAATTCGGAGGGGTATCGATGCTCACTGT
CCCAGGCCCCCAGGACCTCCTGGAGCCATGGGACCCCCAGGACCTCCAGGTGCCCCAGGCCCTGCCGGCCACG
TGGTCTCCAGGACATCAAGAAGTTCTTAATTTACAAGTCCCCCAGGCCACCCGGCCACGCGGGCCACCAGG
GCCTTCCATTCCAGGCCACCAGGACCCGAGGCCACCAGGGGAGGGTTTGGCAGGCCACCAGGCCACCAGG
ATCGTTCTGTCCAACCTCAGAAACCTTCTCTCCGGCCCCCAGGCCACCTGGCCCCCAGGTCCCAAGGGAGA
CCAAGGTCCCCCAGGCCCCAGAGGACACCAAGGCGAGCAAGGCCCTCCAGGTTTCTCAACCTCAGGGTCCAGTTC
TTTCGGACTCAACCTTCAGGGACCACCAGGCCACCTGGCCCCCAGGGACCCAAAGGTGACAAAGGTGATCCAGG
TGTTCCAGGGGCTCTTGGCATTCCTAGTGGTCTTCTGAAGGGGGATCATCAAGTACCATGTACGTGTACAGGCC
GCCAGGGCCCCCTGGGCCCCCTGGGCTCCGGGCTCTATCAGCAGCTCTGGCCAGGAGATTCAGCAGTACATCTC
TGAGTACATGCAGAGTGACAGTATTAGATCTTACCTATCCGGAGTTTCAAGGTCCCCCAGGCCACCTGGTCCCC
AGGACCTGTACACCACATCACAGGCGAGACTTTCGACTACTCAGAGCTGGCAAGCCACGTGTGTAGCTACTTACG
GACTTCGGGGTACGGTGTGAGCTTGTCTCTGCTCTCCATCTCTTCTGAAGACATTCTGGCTGTGCTGCAGCGGGA
TGACGTGCGTCACTACCTACGTCACTTGTATGGGCCCTCGGGTCCGCCAGGGCCACCAGGAGCCAGTGGAGA
TGGGTCCCTCCTGTCTTTGGACTATGCAGAGCTGAGTAGTCGATCTCAGCTACATGTGAGTTCCTGGGATCAG

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FIGURE 3058B

CATTGGGCTTCTTGGTCCCCGGGGCCCCCTGGCTTGCCGGGAACCTCCTATGAGGAGCTCCTCTCCTTGCTGCG
AGGGTCTGAATTCAGAGGCATCGTTGGACCCCCAGGTCCCCCGGGTCCACCAGGGATCCCAGGCAATGTGTGGTC
CAGCATCAGCGTGGAGGACCTCTCGTCTTACTTACATACTGCCGGCTTGTCATTTCATCCCAGGCCCTCCAGGACC
TCCTGGTCCCCCAGGGCCTCGAGGGCCCCCGGGTGTCTCAGGAGCCCTGGCAACCTATGCAGCTGAAAAACAGCGA
CAGCTTCCGGAGCGAGCTGATCAGCTACCTCACAAGTCCTGATGTGCGCAGCTTCATTGTTGGCCCCCAGGCCC
TCCTGGGCCGAGGGACCCCCCTGGGGACAGCCGCCTCCTGTCCACGGATGCCTCCCACAGTCGGGGTAGCAGCTC
CTCCTCACACAGCTCATCTGTACAGCGGGGCAGCTCCTACAGCTCTTCCATGAGCACAGGAGGAGGTGGTGCAGG
CTCCCTGGGTGCAGGCGGTGCCTTTGGTGAAGCTGCAGGAGACAGGGGTCCCTATGGCACTGACATCGGCCCAGG
CGGAGGCTATGGGGCAGCAGCAGAAGCGGCATGTATGCTGGCAATGGCGGACTATTGGGAGCTGACTTTGCTGG
AGATCTGGATTACAATGAGCTGGCTGTGAGGGTGTGAGAGCATGCAGCGTCAGGGCCTACTGCAAGGGATGGC
CTACACTGTCCAGGGCCCCACCAGGCCAGCCTGGGCCACAGGGGCCACCCGGCATCAGCAAGGTCTTCTCTGCCTA
CAGCAACGTGACTGCGGACCTCATGGACTTCTTCCAACTTATGGAGCCATTCAAGGACCCCCCTGGGCAAAAAGG
AGAGATGGGCACTCCAGGACCCAAAGGTGACAGGGGCCCTGCTGGGCCACCAGGTCATCCTGGGCCACCTGGCCC
TCGAGGACACAAGGGAGAAAAAGGAGACAAAGGTGACCAAGTCTATGCTGGGCGGAGAAGGAGAAGAAGTATTGC
TGTCAAGCCGTGAGCTAGCCATGGCAGGACAGCTCCTGGACCAGGTCTCATAATGCATGTGGCACTTAGGTCCAA
GGTCTCCAGAGGGTGAAAGCTGGAGTCTGTCAATGTCTACTGAGACAGCACAGCCAACCTAGCTAGCAACATTT
GTTTTAGTCTGAACAATATATACTTATAGAATTCAGTCAAAGATACACAATCTGAAACAGCTTCATGGGGTGGAC
TCTAACAGTAGTTGCAATGTTTTAGAATGAGACTTACTTCTCTGCTATCTAGATCTGAACCTCCTTGGCTTCTTTA
CTTAGTTCAAGCCCCAGCCTAGGAAAGCCAGTTACATAAAAGTTGGCTCAGGAGTCTTAGAGCTTTACCTAAATA
TGAGCCCAGAAAACGGAGGATGGGGGTGGGGCGCCTTCCTGGAGGTGACACTTGATGGGGGTGTGTTCTGGTTAC
TGTTCTAAGGCTGTGCCATCAGCTCCTTCCCTCCCTGTTTATTCTGCATTCTCTAGTCAGTTGGCTAAGAAGTGA
CTCTTGCAACTAAAAAATTAAGAAATTCATTCCCCTCTAGGAGGTGATGATAGGGTTTCTAATGGTTATATGT
ATATCACATTCCCATTTTGCTTAGAAAGTCTGATTGTAGCTATGATTGTCCGTAGGCCCATACTAGAGTTCATGGA
TATGTTATACTGAACCAGGCCAGAGCAAACAGAAAAAGAAGGTTGAGGGCAATGGACAAGGAAGGAATAAAGGGA
GAAGAGGGAAAACAGAAAACCTGATGCTGGGGACACAGCATCAGCTCAAGACGTACCCCTCCATTCTGCACTCAG
AAAATGGCACTTGGGGGACIGGGCGCAGTTGGTCTTTAACCACTTTTCAATGTCTAAAAACATTTGTTTGTGGTC
TATAAGATGAAACATCATTTTCAATCGTAAAATTTCCATTAAAGAAGTTTTTTTTTCTAA

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FIGURE 3059A

CTGGTCTCCGCGTGTGTGAGTACCGCGGCGCGAGGTTAGTGGTAGCTGGGTGCAGACGCCGTGGCGCTGGAGACC
CAAACATGGCAAACCTGGAAGAAAGCTTCCCCGAGGAGGTACAAGAAAGATCCACAAACCAGAGAAAGCTTTCC
AGCAGTCAGTTGAACAAGACAACCTTATTTGATATTTCTACTGAAGAGGGATCCACCAAAGAAAAAGAGCCAGA
AGGGGCCAGCAAAAACAAAAAGTTGAAAATCGAAAAGAGAGAAAGCAGCAAGTCCGCAAGAGAGAAGTTTGAAA
TCCTTAGTGTGTGAGTCCCTGTGTGAGGGAATGCGTATTTTGGGTTGCGTGAAAGAGGTGAATGAAGTGAAGTGG
TGATTAGTCTCCCCAATGGCCTCCAGGGCTTTGTGCAAGTCACTGAAATCTGTGATGCCTACACCAAAAAGCTGA
ATGAGCAGGTGACACAAGAACAACCTCTGAAGGACCTACTTCACTTGCCCTGAAGTCTTCTCACCTGGAATGCTGG
TAAGATGTGTGGTGGAGCAGTCTGGGCATCACAGACAGGGGCAAGAAGAGTGTCAAGCTGTCTCTGAACCCCAAAA
ATGTCAACAGAGTGCTGAGTGCTGAGGCCCTGAAGCCTGGCATGCTACTTACAGGTACCGTATCCAGCCTGGAAG
ACCATGGCTACCTAGTGGACATTGGTGTGATGGGACCAGAGCTTTTCTGCCACTGCTGAAAGCCCAGGAGTACA
TCAGACAGAAGAACAAGGTGCTAAACTAAAGGTGGGTCACTACCTGAACTGCATTGTTGAAAAGGTGAAAGGCA
ACGGAGGAGTTGTTAGTCTGTCTGTGTTGGTCACTCAGAGGTTTCTACGGCCATTGCTACTGAACAGCAGAGCTGGA
ACCTTAATAACTTGCTACCAGGACTGGTGGTCAAAGCTCAGGTACAGAAGGTGACTCCATTTGGCCTTACGCTAA
ACTTCTCACATTCTTACGGGCGTGGTTGACTTTATGCACCTGGATCCCAAGAAAGCTGGAACATATTTCTCAA
ATCAGGCAGTGAGGGCCTGCATCCTTTGCGTCCATCTCGAACCAGAGTTGTGCACCTGAGCCTGCGCCCCATCT
TCCTACAGCCTGGACGCCCCACTCACCCGACTCTCTTGCCAGAACCTTGGAGCAGTGCTGGATGATGTTTCTGTCC
AGGGTTTTTTTCAAAAAGGCTGGGGCCACCTTTAGGCTGAAGGATGGGGTTCTGGCCTATGCCCGGCTCAGCCATC
TCTCTGATTCTAAGAACGTCTTCAATCCTGAGGCCTCAAGCCAGGGAACACTCACAAGTGTAGAATTATTGACT
ACAGCCAAATGGATGAAGTGGCCTTGCTCTCTCTACGAACGTCTATTATTGAAGCTCAGTACCTTAGATATCATG
ACATCGAACCCTGGGGCAGTGGTAAAGGGCACAGTCTAACCATAAAGTCATATGGGATGCTGGTGAAGGTGGGCG
AGCAGATGAGGGGCTGGTACCTCCCATGCACCTGGCTGACATCTGATGAAGAATCCGGAGAAGAAGTACCACA
TCGGGGATGAGGTCAAGTGCCGGGTTTTGCTTTGTGACCTGAAGCCAAGAAGCTGATGATGACCCTGAAAAAAA
CCCTGATTGAGTCCAACTACCTGTCATTACCTGCTATGCCGATGCCAAGCCTGGTCTGCAGACACATGGCTTCA
TCATCAGGGTCAAGGACTATGGCTGCATTGTGAAGTTCTACAACAATGTGCAGGGACTGGTGGCCCAAGCATGAGC
TCAGTACTGAGTATATCCCTGACCCGGAGAGAGTTTTTTACACTGGCCAGGTGGTGAAGGTTGTGCTATTGAACT
GTGAGCCATCCAAAGAGAGGATGCTCTTATCCTTCAAGCTGTCGAGTGATCCAGAGCCAAAGAAAGAGCCTGCAG
GACACAGTCAGAAGAAAGGAAAAGCCATTAACATTGGGCAGTTGGTAGATGTGAAGGTTTTAGAGAAGACCAAAG
ATGGGCTGGAGGTGGCTGTCTGCCCCACAACATCCGTGCTTTCTCCCCACATCTCATCTGTCGGACCACGTTG
CCAACGGCCCCATTGTTACATCATTGGCTCCAGGCAGGTGACATCCTTACCAGTCTCTGTCTGAGCCAGAGCG
AGGGGCGTGTTCTTCTTTGAGGAAGCCAGCCTTGGTCTCCACAGTAGAAGGTGGCCAGGATCCCAAGAACTTCT
CAGAAATCCATCCTGGAATGCTGCTCATTGGTTTTGTGAAGAGCATCAAGGACTATGGCGTGTTTATCCAGTTCC
CCTCAGGTCTTAGCGGACTGGCCCCAAAAGCTATCATGAGTGACAAATTTGTGACCTCCACAAGTGACCACTTTG
TTGAGGGCCAGACAGTAGCGGCAAAGGTGACCAATGTGGATGAGGAGAAGCAGCGGATGCTGCTGCTACTGCGGC
TGTCGGACTGTGGTCTGGGGGACTTGGCTATCACCAGCCTCCTCCTCCTGAATCAGTGCTTGAGGAGCTGCAGG
GCGTGCGCAGCCTTATGAGCAACCGAGACTCTGTGTTGATCCAGACGCTGGCCGAGATGACCCAGGAATGTTCC
TTGACCTAGTGGTGCAGGAGGTGTTGGAAGATGGCTCTGTGGTATTAGTGGGGTCCAGTGCCCGACCTGGTCC
TGAAAGCCAGCAGATACCATCGCGCAGGGCAGGAGGTGGAATCTGGGCAGAAAAAGAAGGTTGTTATCTTAAATG
TTGATCTTTTGAAGTTGGAAGTGACGTTTTCCCTTACCAGGACTTGGTGAATAGAAAAGCTAGAAAGCTGAGGA
AAGGCAGCGAACACCAGGCGATTGTGCAGCACTTGGAGAAGTCCTTTGCCATTGCCTCCTTGGTAGAGACGGGCC
ACCTGGCAGCTTTCTCCCTGACCTCTCACCTCAACGACACCTTCCGCTTTGACTCAGAGAAATGCAAGTGGGAC
AGGGTGTCTCCCTAACCTCAAGACCACAGAACCAGGAGTGAAGTGGCCTTCTTTTGGCTGTGGAGGGGCCGCTG
CCAAGAGGACCATGAGGCGGACCCAGAAGGACTCTGAGACAGTTGATGAGGATGAAGAAGTGGATCCAGCTCTGA
CTGTAGGGACCATAAAGAAGCACACCTCTCCATCGGGGACATGGTCAAGGGACTGTCAAGTCCATTAAAGCCTA
CCCATGTGGTTGTGACTCTGGAAGATGGCATTATTGGCTGTATCCATGCCTCCACATTCTAGATGATGTTCCAG
AGGGCACCTCTCCTACTACCAAGCTGAAGGTTGGGAAGACGGTCACTGCCGAGTGATTGGCGGGCGAGACATGA
AGACATTCAAGTATCTCCAATAAGTCACCCCAGATTCTGTTTGAACCATCCCGGAGCTGAGTGTTTGGCCAAAGTG
AGCTGGAGGATGGCCACACTGCTCTTAACACTCACTCTGTTAGCCCCATGGAGAAGATTAAACAGTACCAGGCCG
GCCAGACTGTTACTTGCTTCTTAAAGAAATACAATGTGGTGAAGAAATGGCTTGAGGTGGAGATTGCCCCAGACA

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FIGURE 3059B

TCCGGGGGAGAATTCCCTTATTGCTCACTTCTCTGAGCTTCAAGGTTCTGAAGCATCCAGATAAGAAGTTCCGGG
TTGGCCAGGCCCTGAGGGCCACCGTTGTTGGCCCAGATTCCCTCCAAGACCCTCTTATGTCTGTCCCTCACAGGTC
CTCACAAGCTTGAGGAAGGGGAAGTGGCCATGGGCCGAGTGGTGAAGGTGACTCCCAACGAGGGGCTGACCGTCT
CCTTCCCTTTTGGGAAGATAGGAACAGTCAGTATATTTACATGAGTGACTCCTACTCCGAGACGCCCTTGAAG
ACTTCGTCCCCCAGAAGGTTTTTCAGATGTTACATCCTGTCCACTGCAGACAACGTATTGACTTTGTCTGCTGCGAT
CATCCAGAACAACCCGGAGACGAAAAGCAAAGTAGAAGATCCAGAGATTAACCTCCATCCAGGACATTAAGGAAG
GGCAGCTTCTGAGGGGCTATGTAGGGTCCATCCAGCCACACGGTGTGTTCTTTTCGCCTTGGCCCCCTCCGTTGTGG
GTTTGGCTCGGTACTCCCATGTCTCCAGCACAGCCCGTCCAAGAAAGCCCTTTATAACAAACACCTCCCTGAAG
GGAAGCTGCTCACAGCCAGGGTCTACGCCTTAACCACCAGAAGAACCTGGTAGAGCTGTCTTCTCCCGGAG
ACACTGGGAAGCCAGACGTGCTTTCTGCTTCCTTGGAAAGGGCAACTTACAAAGCAAGAGGAGAGGAAAAACAGAGG
CTGAGGAGAGAGACCAGGAGGGGAAAAAGAAAAATCAGAAAAGGAACGAGAAGAAGAACAGAGGGGCGAGGAGG
AGGTGGAGATGCCAGCAAGGAGAAGCAACAGCCCCAGAAGCCACAGGCGCAGAAGCGGGGCGGGGAGTGCC
GGGAGTCTGGGAGTGAGCAGGAAAGAGTGAGCAAGAAGCCAAAGAAAGCCGGCTGTGAGAGGAGACGACAGCC
TTGTGGACGTGTACTATCGGGAGGGAAAAAGAGGAGGCAGAAGAGACGAATGTGCTGCCCAAGGAGAAGCAACCA
AGCCAGCAGAAGCGCCCCGGCTGCAGCTGTCTTACGGCTTCGCTTGGAAATGTGGGACTAGACTCTCTGACCCCGG
CCTTGCCACCTCTAGCAGAGAGCTCAGACAGCGAGGAGGATGAGAAGCCACACCAAGCCACGATAAGAAAAAGCA
AGAAAGAAAGGGAGTTGGAGAAGCAGAAGGCAGAGAAGGAACGTCCCGCATTGAGGAGGCGCTGATGGATCCTG
GGCGGCAGCCAGAGTCCGCGGATGATTTTGACCGACTGGTGTGAGCTCCCCAACAGCTCCATTCTGTGGCTGC
AGTACATGGCTTTCCACCTGCAGGCCACGGAGATCGAGAAGGCCCGTGCCGTGGCTGAGAGGGCCCTTAAGACCA
TCTCCTTCAGAGAGGAGCAGGAGAAGCTGAACGTGTGGGTGGCTCTGCTGAACCTGGAGAACAATGACGGCTCTC
AGGAGTCCCTGACCAAGGTCTTTGAGCGAGCCGTGCAGTACAACGAGCCTCTCAAAGTCTTTCTCCACCTGGCTG
ACATCTACGCCAAGTCAGAGAAATTCAGGAAGCTGGTGAACCTCTACAACCGATGTGAAGCGTTTCCGGCAGG
AGAAAGCTGTGTGGATCAAATACGGCGCCTTCTTCTGCGGAGGAGCCAGGCTGCAGCCAGTCACCGCGTGTGC
AGCGAGCCCTGGAGTGCTGCCTAGCAAGGAGCATGTGGATGTGATTGCCAAGTTTGCCCAGCTTGAGTTTCAGC
TGGGGGATGCAGAGCGGGCCAAAGCCATTTTGTAGAACACGCTGAGCACCTACCCAAAGCGCACAGATGTCTGGT
CGGTCTATATCGACATGACCATCAAGCACGGCAGCCAGAAGGACGTCCGGGACATCTTTGAGCGGGTCATTCATC
TGAGCTTGGCCCCCAAGAGAATGAAGTTCTTCTTCAAGCGCTACCTGGACTACGAGAAGCAGCATGGCACTGAGA
AGGATGTGCAGGCAGTCAAGGCCAAGGCCCTGGAGTATGTGGAGGCCAAGAGCTCAGTGCTAGAGGACTAGTGGC
AGGCTGGCTCTGTGGGACACTGTCAACAATGGGCCAGCCCGGCCCGCCTCGAGTGCCTGGGCACTCGGAAAAC
GTTACCTCAGGACTCTATTTAAATGCTGCTTTTTCTGACGACGCTTGGGGAAATCCTGTGAGGATGAAAAGGAA
GTTGAGATTTTTTAAATCCCTCTTCGCTTGCTTTATTTTTCAGTACCAACTTGTTATCTTTTCCCTTATCTGAGGC
TACCTGGGGATTGTGGGCAGCAGGCCCTGGACTCCAGAAATGCTGAGGGTCCCTCTTCCAGGGGAGTTCCCTG
GGGAGCAAGAGTAGAGGGGCTATTCCCGAGGGTCTGTGGTCAAGGTCTGCTTTGTCCCTGGCAGGCTGTGAGT
CCAGCTGGAGGGGGTCAGTAGGCTCCAGGGAGTGGGCCCTCCCTCCGATCTTGGAGTCTCTGGGTGTTCCCTTCA
GCCTCAGCCTCACTGGTACCTTCTGCCCTTTAGGGGAGGCTATGAGTCTGGGACAGGAGGACAAAATTCAGAGCCC
AGAGGGGGAAATGGAGAAACCTGGGCTGCTGAGGAAAGCCACGGGTGTTGGCGTGAACCTGATGATGTCTCATCCC
ACGCCCCTATGGCCACATTACCTAACCTCTCCATATCTGGGCTATTCAAGGTCTTGAGGGCCAGCACAGACCCA
GCTAGTTGTTGAAGCCAGTTCTTTTTTGTCTTGGTCAAGGGGAATTAAACGTTTTCTCTGGCAG

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FIGURE 3060

MANLEESFPRGGTRKIHKPEKAFQQSVEQDNLFDISTEEGSTKRKKSQKGPACTKKLKIEKRESSKSAREKFEIL
SVESLCEGMRI LGCVKEVNELELVISLPNGLQGFVQVTEICDAYTKKLNEQVTQEQLKDLLHLPELFS PGMLVR
CVVSSLGITDRGKKS VKLSLNPKNVNRVLSAEALKP GMLLTGTVSSLEDHG YLVDIGVDGTRAF LPL LKAQEYIR
QKNKGAKLKV GQYLNCIVEKVKGNGGVVSVSGHSEVSTAIATEQQSWNLNNLLPGLVVKAVQVQVTPFGLTLNF
LTFFTGVVDFMHLDPKKAGTYFSNQAVRACILCVHPRTRVVHLSLRP IF LQPGRP LTRLSCQNLGAVLDDVPVQG
FFKKAGATFRLKDGVLAYARLSHLSDSKNVFNPEAFKPGNTHKCRIIDYSQMDLALLSLRTSIEAQYLRYHDI
EPGAVVKGTVLTIKSYGMLVKVGEQMRGLVPPMHLADI LMKNPEKKYHIGDEVKCRVLLCDPEAKKLMMTLKKT
IESKLPVITCYADAKPGLQTHGFIIRVKDYGCIVKFYNNVQGLVPKHELSTEYIPDPERVFYTGQVVKVVVNCE
PSKERMLSFKLSSDPEPKKEPAGHSQKKGKAINIGQLVDVKVLEKTKDGLVAVLPHNIRAF LPTSHLS DHVAN
GPLLHHWLQAGDILHRVLCLSQSEGRVLLCRKPALVSTVEGGQDPKNFSEIHPGMLLIGFVKS IKDYGVFIQFPS
GLSGLAPKAIMSDKFVTSTSDHFVEGQTVAAKVTNVDEEKQRM LLSLRLSDCGLGDLAITS LLLL NQCLEELQGV
RSLMSNRDŠVLIQT LAEMTPGMFLDLVVQEVL EDSGVVFSGGPVPDLVLKASRYHRAGQEVESGQKKKVILNVD
LLKLEVHVS LHQDLVNRKARKLRKGSEHQAI VQHLEKSFAIASLVETGHLAAFS L TSHLNDTFRFDSEKLQVGQ
VSLTLKTTEPGVTGLLLAVEGPAAKRTMRPTQK DSETVDEDEEVDPALTVGTIKKHTLSIGDMVTGT VKSIKPTH
VVVTLEDGII GCIHASHILDDVPEGTSP TTKLVGKTVTARVIGGRDMKTFKYLPI SHPRFVRTIPELSVRPSEL
EDGHTALNTHSVSPMEKIKQYQAGQTVTCFLKKYNVVKWLEVEIAPDIRGRIP LLLTSLSFVKLKHDPKKFRVG
QALRATVVGPDSSKTLCLSLTGPHKLEEGEVAMGRVVKVTPNEGLTVSFPFGKIGTVSIFHMSDSYSETPLEDF
VPQKVFRCYILSTADNVLTLSLRSSRTNPETKSKVEDPEINSIQDIKEGQLLRGYVGSIQPHGVFFRLGPSVVG
ARYSHVSQHSPSKKALYNKHLPEGKLLTARVLRNLHQKNLVELSFLPGDTGKPDVLSASLEGQLTKQEERKTEAE
ERDQKGEKKNQKRNEKKNQKGQEEVEMPSKEKQPPQKPQAQKRGGRECRESGSEQERVSKPKKAGLSEEDDSL
DVYYREGKEEAEETNVLPEKQTKPAEAPRLQLSSGFAWNVGLDSLTPALPPLAESSDSEDEKPHQATIKKSKK
ERELEKQKAEKELSRIEEALMDPGRQPESADDFDLVLSSPNSSILWLQYMAFHLQATEIEKARAVAERALKTIS
FREEQEKLNVWVALLNLENMYGSQESLTKVFERAVQYNEPLKVFLHLADIYAKSEKFEAGELYNRMLKRFRQEK
AVWIKYGAFLLRRSQAASHRVLQRALECLPSKEHVDVIAKFAQLEFQLGDAERAKAIFENTLSTYPKRTDVWSV
YIDMTIKHGSQKDVRDIFERVIHLSLAPKRMKFFFKRYLDYEQHGTEKDQAVKAKALEYVEAKSSVLED

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FIGURE 3061

CCGAGAGGTGGTTACATTTCGTTGAAGGACACCAGCTGCGGAATTTGCGGCTTTGGCAGACCCAGCTGAGTCACTG
TCACTGCCTACCAATCTCGACCGGACCTCGACCGGCTCGTCTGTGCTGCCAATCGACTCGGCGTGGCGTCGGTCG
TGGTAGATAGGCGGTCATGCATACGAATTTTCAGCTCTTGTTCTGGTGACCTTTTGAATACGTCTTGTCTATAAA
AGAAATTCATGCCCTTTGTAAAATACACAGATTGAAATCATGGCGAGGTCCAGAAAGTGATGCGCAATACCAGTTCA
CTGGTATTAAAAAATATTTCAACTCTTATACTCTCACAGGTAGAATGAACTGTGTACTGGCCACATATGGAAGCA
TTGCATTGATTGTCTTATATTTCAAGTTAAGGTCCAAAAAACTCCAGCTGTGAAAGCAACATTAAATGGATTTTA
AACTGTCTACGGTTCTTAACCTCATCTGTTAAGTTCCCATGCCTGGAGAAGCTAATGCCAACTCATCATGTGATA
ATTCAATTTGTACAATAAATTATGAACCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3062

MAGPESDAQYQFTGIKKYFNSYTLTG RMNCVLATYGSIALIVLYFKLRSKKT PAVKAT

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FIGURE 3063

CGGCATGTGGAAGAAGGTGAAGATGGCGGTGGCCAGGGCCGGGGTCTTGGGAGTCCAGTGGCTGCAAAGGGCATC
CCGGAACGTGATGCCGCTGGGCGCACGGACAGCCTCCCACATGACCAAGGACATGTTCCCGGGGCCCTATCCTAG
GACCCAGAGAAGACGGGCCGCCGCCAAGAAGTATAATATGCGTGTGGAAGACTACGAACCTTACCCGGATGA
TGGCATGGGGTATGGCGACTACCCGAAGCTCCCTGACCGCTCACAGCATGAGAGAGATCCATGGTATAGCTGGGA
CCAGCCGGGCCTGAGGTTGAACTGGGGTGAACCGATGCACTGGCACCTAGACATGTACAACAGGAACCGTGTGGA
TACATCCCCCACACCTGTTTCTTGGCATGTCATGTGTATGCAGCTCTTCGGTTTCCTGGCTTTCATGATATTCAT
GTGCTGGGTGGGGGACGTGTACCCTGTCTACCAGCCTGTGGGACCAAAGCAGTATCCTTACAATAATCTGTACCT
GGAACGAGGCGGTGATCCCTCCAAAGAACCAGAGCGGGTGGTTCACTATGAGATCTGAGGAGGCTTCGTGGGCTT
TTGGGTCTCTAACTAGGACTCCCTCATTCTAGAAATTTAACCTTAATGAAATCCCTAATAAACTCAGTGCTG
TGTTAAAAA

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FIGURE 3064

MAVARAGVLGVQWLQRASRNVMLGARTASHMTKDMFPGPYPRTPEERAAAAKKYNMRVEDYEPYPDDGMGYGDY
PKLPDRSQHERDPWYSWDQPGLRLNWGEPMHWHLDMYNRNRVDTSPVPSWHVMCMQLFGFLAFMIFMCWVGDVY
PVYQPVGPKQYPYNNLYLERGGDPSKEPERVVHYEI

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FIGURE 3065

ACGGTCACCCGTTGCCAGCTCTAGCCTTTAAATTCCCGGCTCGGGGACCTCCACGCACCGCGGCTAGCGCCGACA
ACCAGCTAGCGTGCAAGGCGCCGCGGCTCAGCGCGTACCGGCGGGCTTCGAAACCGCAGTCCTCCGGCGACCCCG
AACTCCGCTCCGGAGCCTCAGCCCCCTGGAAAGTGATCCCGGCATCCGAGAGCCAAGATGCCGGCCCACTTGCTG
CAGGACGATATCTCTAGCTCCTATACCACCACCACCATTACAGCGCCTCCCTCCAGGGTCTGCGAGAATGGA
GGAGATAAGTTGGAGACGATGCCCTCTACTTGGAAGACGACATTCGCCCTGATATAAAAGATGATATATATGAC
CCCACCTACAAGGATAAGGAAGGCCCAAGCCCCAAGGTTGAATATGTCTGGAGAAACATCATCCTTATGTCTCTG
CTACACTTGGGAGCCCTGTATGGGATCACTTTGATTCTTACCTGCAAGTTCTACACCTGGCTTTGGGGGGTATTC
TACTATTTTGTGAGTGCCTGGGCATAACAGCAGGAGCTCATCGTCTGTGGAGCCACCGCTCTTACAAAGCTCGG
CTGCCCCCTACGGCTCTTTCTGATCATTGCCAACACAATGGCATTCCAGAATGATGTCTATGAATGGGCTCGTGAC
CACCGTGCCCAACACAAGTTTTCAGAAACACATGCTGATCCTCATAATTCCCGACGTGGCTTTTTCTTCTCTCAC
GTGGGTTGGCTGCTTGTGCGCAACACCCAGCTGTCAAAGAGAAGGGGAGTACGCTAGACTTGTCTGACCTAGAA
GCTGAGAAACTGGTGATGTTCCAGAGGAGGTACTACAAACCTGGCTTGCTGATGATGTGCTTCATCCTGCCACG
CTTGTGCCCTGGTATTTCTGGGGTGAACTTTTCAAACAGTGTTGTTGTTGCCACTTTCTTGCGATATGCTGTG
GTGCTTAATGCCACCTGGCTGGTGAACAGTGCTGCCACCTCTTCGGATATCGTCCTTATGACAAGAACATTAGC
CCCCGGGAGAATATCCTGGTTTCACTTGAGCTGTGGGTGAGGGCTTCACAACCTACCACCACTCCTTTCCCTAT
GACTACTCTGCCAGTGAGTACCGCTGGCACATCACTTCACCACATTCTTCATTGATTGCATGGCCGCCCTCGGT
CTGGCCTATGACCGGAAGAAAGTCTCCAAGGCCGCCATCTGGCCAGGATTAAGAAGAACCGGAGATGGAAACTAC
AAGAGTGGCTGAGTTTGGGGTCCCTCAGGTTCCTTTTTCAAAAACCAGCCAGGCAGAGGTTTTAATGTCTGTTTA
TTAACTACTGAATAATGCTACCAGGATGCTAAAGATGATGATGTTAACCATTCCAGTACAGTATTCTTTTAAAA
TTCAAAGTATTGAAAGCC

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FIGURE 3066

TCTCTTGATTCTAGTCTCTCGATATGGCACCTCCGTCAGTCTTTGCCGAGGTTCCGCAGGCCAGCCTGTCTTG
GTCTTCAAGCTCACTGCCGACTTCAGGGAGGATCCGGACCCCGCAAGGTCAACCTGGGAGTGGGAGCATATCGC
ACGGATGACTGCCATCCCTGGGTTTTGCCAGTAGTGAAGAAAGTGGAGCAGAAGATTGCTAATGACAATAGCCTA
AATCAGGAGTATCTGCCAATCCTGGGCCTGGCTGAGTTCCGGAGCTGTGCTTCTCGTCTTGCCCTTGGGGATGAC
AGCCCAGCACTCAAGGAGAAGCGGGTAGGAGGTGTGCAATCTTTGGGGGGAACAGGTGCACTTCGAATTGGAGCT
GATTTCTTAGCGCGTTGGTACAATGGAACAAACAAGAACACACCTGTCTATGTGTCCTACCAACCTGGGAG
AATCACAATGCTGTGTTTTCCGCTGCTGGTTTTAAAGACATTCCGTCCTATCGCTACTGGGATGCAGAGAAGAGA
GGATTGGACCTCCAGGGCTTCCTGAATGATCTGGAGAATGCTCCTGAGTTCTCCATTGTTGTCCTCCACGCCGTG
GCACACAACCCAACTGGGATTGACCCAACTCCGGAGCAGTGGAAGCAGATTGCTTCTGTCTATGAAGCACC GGTTT
CTGTTCCCTTCTTTGACTCAGCCTATCAGGGCTTCGCATCTGGAAACCTGGAGAGAGATGCCTGGGCCATTTCGC
TATTTTGTGTCTGAAGGCTTCGAGTTCTTCTGTGCCAGTCCTTCTCCAAGAACTTCGGGCTCTACAATGAGAGA
GTCGGGAATCTGACTGTGGTTGGAAAAGAACCTGAGAGCATCCTGCAAGTCCTTTCCAGATGGAGAAGATCGTG
CGGATTACTTGGTCCAATCCCCCGCCAGGGAGCACGAATTGTGGCCAGCACCTCTCTAACCTGAGCTCTTT
GAGGAATGGACAGGTAATGTGAAGACAATGGCTGACCGGATTCTGACCATGAGATCTGAACCTCAGGGCACGACTA
GAAGCCCTCAAAAACCCCTGGGACCTGGAACACATCACTGATCAAATTGGCATGTTTCAGCTTCACTGGGTTGAAC
CCCAAGCAGGTTGAGTATCTGGTCAATGAAAAGCACATCTACCTGCTGCCAAGTGGTCTGAATCAACGTGAGTGGC
TTAACCAACCAAAAATCTAGATTACGTGGCCACCTCCATCCATGAAGCAGTCACCAAAATCCAGTGAAGAAACACC
ACCCGTCCAGTACCACCAAAGTAGTTCTCTGTCTATGTGTGTTCCCTGCCTGCACAAACCTACATGTACATACCAT
GGATTAGAGACACTTGCAGGACTGAAAGCTGCTCTGGTGAGGCAGCCTCTGTTTAAACCGGCCCCACATGAAGAG
AACATCCCTTGAGACGAATTTGGGAGACTGGGATTAGAGCCTTTGGAGGTCAAAGCAAATTAAGATTTTTATTTAA
GAATAAAAGAGTACTTTGATCATGAGACATAGGTATCTTGTCCCTCTCACTAAAAAGGAGTGTTGTGTGTGGCGG
CCACGTGCTTCTATGTGGTGTGTTGACTCTGTACAAATTCTAGTCCCAAAGATCAAGTTGTCTGAAGGAGCCAAAG
TGTGAATGTGGGTGTGGCTGCGGCATTAAATTCATCATCTCAACCCAGAGTGTCTGGTCTCCCTGCTCTTTCTG
CATGGTTGTGTCCCTAGTCCTAAGCTTTGGTTCTTTAGGGTGACTGTGGTAAGAAGGATATTTAATCATGACATG
CACGGACACGTACATATTTAACTGAAACAAGTTTTACCAACAGTATTTACTCGTGATGTGCGTAGTGCAATTCTG
ATATTTTTGAGCCATTCTATTGTGTCTACTTCACCTAAAAAATAAAATAAAATGTTGATCAAG

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FIGURE 3067

MAPPSVFAEVPQAQPVLVFKLTADFREDPDPRKVN LGVGAYRTDDCHPWLPVVKKVEQKIANDNSLNHEYLPIL
GLAEFRSCASRLALGDDSPALKEKRVGGVQSLGGTGALRIGADFLARWYNGTNNKNTPVYVSSPTWENHNAVFS
AGFKDIRSYRYWDAEKRGDLQGFLNDLENAPEFSIVVLHACAHNPTGIDPTPEQWKQIASVMKHRFLFPFFDSA
YQGFASGNLERDAWAI RYFVSEGFEFFCAQSFSKNFGLYNERVGNLTVVGKEPESILQVLSQMEKIVRITWSNPP
AQGARIVASTLSNPELFEWTGNVKTMA DRILTM RSELRARLEALKTPGTWNHITDQIGMFSFTGLNPKQVEYLV
NEKHIYLLPSGRINVSGLT TTKNLDYVATSIHEAVTKIQ

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FIGURE 3068A

GGCTGGGGGGCGCGGGCGGGAGGCGGATAAAAAGGCCCCAGGGCGCCCGGGAGGGAGCCCGTTAGCGCTGCTC
CGCCGCGGCGCCCGCCAGCCCCGACTGTCCGCGCTCCATCTGGTATCTTGGCCTCAGCTGTCTTGAAGTCAC
CATGGCGAGGTCCCCACCAGCCACCCTCTTTCTGTTCTTGCTGCTAGGCCAGCCCCCTCCAGCAGGCCACA
GTCACTGGGCACCACTAAGCTCCGGCTGGTGGGCCAGAGAGCAAGCCAGAGGAGGGCCGCTGGAGGTGCTGCA
CCAGGGCCAGTGGGGCACCGTGTGTGATGACAACCTTTGCTATCCAGGAGGCCACAGTGGCTTGCCGCCAGCTGGG
CTTCGAAGCTGCCTTGACCTGGGCCACAGTGCCAAGTACGGCCAAGGGGAGGGACCCATCTGGCTGGACAATGT
GCAGTGTGTGGGCACAGAGAGCTCCTTGACCAGTGCGGGTCTAATGGCTGGGGAGTCAGTGAAGTCACTC
AGAAGACGTAGGGGTGATATGCCACCCCCGCGCCATCGTGGCTACCTTTCTGAAACTGTCTCCAATGCCCTTGG
GCCCCAGGGCCGCGGGCTGGAGGAGGTGCGGCTCAAGCCCATCCTTGCCAGTGCCAAGCAGCATAGCCCAGTGAC
CGAGGGAGCCGTGGAGGTGAAGTATGAGGGCCACTGGCGGCAGGTGTGTGACCAGGGCTGGACCATGAACAACAG
CAGGGTGGTGTGCGGGATGCTGGGCTTCCCCAGCGAGGTGCCTGTGACAGCCACTACTACAGGAAAGTCTGGGA
TCTGAAGATGAGGGACCCTAAGTCTAGGCTGAAGAGCCTGACGAATAAGAACTCCTTCTGGATCCACCAGGTCAC
CTGCCTGGGGACAGAGCCCCACATGGCCAACCTGCCAGGTGCAGGTGGCTCCAGCCCGGGGCAAGCTGCGGCCAGC
CTGCCCAGGTGGCATGCATGCTGTGGTCAGCTGTGTGGCAGGGCCTCACTTCCGCCACCGAAGACAAAGCCACA
ACGCAAAGGGTCTTGGGCAGAGGAGCCGAGGGTGCCTGCGCTCCGGGGCCAGGTGGGCGAGGGCCGGGTGGA
AGTGCTCATGAACCGCCAGTGGGGCACGGTCTGTGACCACAGGTGGAACCTCATCTCTGCCAGTGTCTGTGTCTG
TCAGCTGGGCTTTGGCTCTGCTCGGGAGGCCCTCTTTGGGGCCCGGCTGGGCCAAGGGCTAGGGCCCCATCCACCT
GAGTGAGGTGCGCTGCAGGGGATATGAGCGGACCCTCAGCGACTGCCCTGCCCTGGAAGGGTCCCAGAATGGTTG
CCAACATGAGAATGCTGCTGCTGTGAGGTGCAATGTCCCTAACATGGGCTTTCAGAATCAGGTGCGCTTGGCTGG
TGGGCGTATCCCTGAGGAGGGGCTATTGGAGGTGCAGGTGGAGGTGAACGGGGTCCCACGCTGGGGGAGCGTGTG
CAGTGAAAACTGGGGGCTCACCGAAGCCATGGTGGCCTGCCGACAGCTCGGCTGGGTTTGGCCATCCATGCCTA
CAAGGAAACCTGGTTCTGGTTCGGGGACGCCAAGGGCCCAGGAGGTGGTGTAGTGGGGTGCCTGCTCAGGCAC
AGAGCTGGCCCTGCAGCAGTGCCAGAGGCACGGGGCCGGTGCCTGCTCCACGGTGGCGGGCGCTTCCCTGGCTGG
AGTCTCCTGCATGGACAGTGCACCAGACCTGGTGTATGAACGCCAGCTAGTGCAGGAGACGGCCCTACTTGGAGGA
CCGCCCCGCTCAGCCAGCTGTATTGTGCCACAGGAGAACTGCCCTCTCCAAGTCTGCGGATCACATGGACTGGCC
CTACGGATACCGCCGCTATTGCGCTTCTCCACACAGATCTACAATCTGGGCCGGACTGACTTTTCGTCCAAAGAC
TGGACGCGATAGCTGGGTTTGGCACAGTGGCCACAGGCATTACCACAGCATTGAGGTCTTACCCACTACGACCT
CCTCACTCTCAATGGCTCCAAGGTGGCTGAGGGGCACAAGGCCAGCTTCTGTCTGGAGGACACAACTGCCCCAC
AGGACTGCAGCGGCGCTACGCATGTGCCAATTTGGAGAACAGGGAGTGACTGTAGGCTGCTGGGACACCTACCG
GCATGACATTGATTGCCAGTGGGTGGATATCACAGATGTGGGCCCCGGGAATTATATCTTCCAGGTGATTGTGAA
CCCCCACTATGAAGTGGCAGAGTCAGATTTCTCCAACAATATGCTGCAGTGCCGCTGCAAGTATGATGGGCACCG
GGTCTGGCTGCACAACTGCCACACAGGGAATTCATACCCAGCCAATGCAGAACTCTCCCTGGAGCAGGAACAGCG
TCTCAGGAACAACCTCATCT**TGA**AGCTGTCACTGCACACTCCTAGCTGCTGCCGATACACCAGATACCTCAGCTTA
TTGGAGCCATGCCCTTACAGAGTCCCAACTCAGAGGAAAAGGGCCAGTGCCAAGGGGCACCAAGAACCTGCTCA
GGAAGCCTTTTGATGGCAAGATCACCATCCAGATGGTATTGCTCCCTCAGGATGGCTCTGGGCTGCCCTAAG
GGCCTGTGGCCTATGGAATATGTCTCCAGGCTTTGCTCAGCTGAGCTCCTCTCTGTAAAGGAAACCCAGTCATC
CCTGAATCTTGCCACAGAGATCCGGGATTAGGAGCTCTCAGTTTCTTAGGGATGGACTATGGCCAGTCCCCCA
TCTAAGTGGTGCTTTGCAAATGTCTTGGAGGAGTATAGGACAGAGGACCAAAATACACAGCAGGTAGTGTAGCT
CTCTGCTAGGAGCTCAAAGCAACACAACCTTGTATCAAAATCACAACCTGGCAGAGAAGCTGGTGGATCCAATCCTT
TCTTCATCTGTTGTTATTTAGAACTCACCTCTCACACTCTGTTCTTTAGTGTCTTACCTTTATCTTACCACACA
CATGGGTGTTTCTATTATCCTTGAAGCAGAGCTCGGGCATCCCTTATTGCCTGATGGGCCAACACCAACAG
TTACGGAGTGTCTGAGAAGGGGCAAGTTTACAGAAAATGGCCAGATAGGGCCTTCTTACAGAGCAGCAAGAGTAG
GCCAAGCAGAAAGACTGCTGAGGTAACACGGACCCAGCCCCGTGTCAGGGCCTCTGCCAAGGAAATAATATGGAC
CATTTACCTGGCAGGCAGTCTGCTCTCTCAGGATACCCAGCATCTCAGGATTGGCTTAAACTTCAAGTCTCA
ACCAAGTGTCTGAAGTGAACCTTTGCATTGAATAAATTTTGCCATGGAAAGAACATCAAAACAAGCCACTCATCTC
TACAGAGATAAGAAAACAAGTTTGGCAGAGCAAGAGACAGAAGACCGTGGAGAAATCAGAAGGGGGAACAGTCAG
TTTAGTTAAGGATGGAACCTGGGAAAGGCCACCATTCTGCTTGATGGGGCTCTGATTGCTCTTGTCAAGTGG
AATAAAACCCCATGGTCTTCTTGACATGATTCTTGATCTTTTCTCCACTGAGACACACTTAAGTGATGATCCTTA

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FIGURE 3068B

CAGGACTGACACCCTAATGCCAATAAAAGTTGCTCATTATGGACTGCTACAAAAAAAAAAAAAAAA

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FIGURE 3069

MARSPPATLFLFLLLLGQPPPSRPQSLGTTKLRLVGPESKPEEGRLEVLHQGWGTVCDDNFATVACRQLG
FEAALTWAHSAKYQGEGPIWLDNVQCVGTESLDQCGSNGWGVSDCSHSEDVGVICHPRRHRGYLSETVSNALG
PQGRRLLEEVR LKP ILASAKQHSPVTEGAVEVKYEGHWRQVCDQGWMTMNSRVVCGMLGFPSEVPVDSHYRKYWD
LKMRDPKSRLKSLTNKNSFWIHQVTCLGTEPHMANCQVQVAPARGKLRPACPGGMHAVVSCVAGPHFRPPKTKPQ
RKGSWAEPRVRLRSGAQVGEGRVEVLMNRQWGTVC DHRWNLI SASVVCRLGFGSAREALFGARLGQGLGPIHL
SEVRCRGYERTLSDCPALEGSQNGCQHENA AAVRCNVPNMGFQNVRLAGGRIPEEGLLEVQVEVNGVPRWGSVC
SENWGLTEAMVACRQLGLGFAIHAYKETWFWSGTPRAQEVMSGVRCSGTELALQQCQRHGPVHCSHGGGRFLAG
VSCMD SAPDLVMNAQLVQETAYLEDRLPSQLYCAHEENCLSKSADHMDWPYGYRRLRLRFSTQIYNLGRITDFRPKT
GRDSWVWHQCHRYHSIEVFTHYDLLTLNGSKVAEGHKASFCLDTNCPTGLQRRYACANFGEQGVTVGCWDTYR
HDIDCQWVDITDVGPGNYIFQVIVNPHYEVAESDFSNNMLQCRCKYDGHVWLHNCHTGNSTYPANAELSLEQEQR
LRNNLI

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FIGURE 3070

GAAAGGAGGAGAGGAAGAGAGGACTAAGAGGGGAGCAAGGCGAGGAGGCCGCGGGCGGGCGCAGCGGGCACCTGGG
CCGTGCTGCCCCGCGAGCAAGGCGCCGCCATTCCGCTGCTCGGGGCGCCGCCGCCGCCGCCACCGCGCCAGGG
GCCATGCTCCCGCGCCCCCGCGCCAGCCGCCGCCAGGCGCGTGCGGCCGCGGCGCGGTGCGCCTGCAGCGG
CCCTTCTGCGCAGCCCGCTGGGCGTGTTCGCGCTGCTGCAGCTGCTGGCCGCGCGCTGCCTTCTGGATCACTATC
GCCACCAGCAAGTACCAGGGCCCCGTGCACTTCGCGCTCTTCGTGTCCGTGCTCTTCTGGTGCTCACCTTGGGC
CTCTACTTCTCAGCTGCTGGGCAAGCAGAGCTGGTCCCCGTGCTGGGCTCGCGCTGGCTCATGGTCAACGTG
GCGCAGCATGTGCTGGCGGCCGCGCTCTACGGCGCCGCCACCGGCATCATGAGCGACCAGATGCAGCGCCACAGC
TACTGCAACCTCAAGGATTACCCGCTCCCTGCGCCTACCACGCTTCTTGGCGGCCCGCTGCGGGCGGCGTC
TGCCACGGCCTCTACCTGCTTTTCGGCGCTCTATGGCTGCGGGCGTGCCTGCCAGGGCAAGCAGGAGGTGGCGTGA

GGCCGCGCGCGCCCCGCGCGGCCCGATCGGGGCGGGGAATCCCCGGAGACCAGCCTCCTTAATCCTTCCCC
GCCGCGCGCCCCGCGCGGGTGCGCCCTGGCACCTCTCCCTGCCCTCCAGCGTTTCCACTGTCGCCCGCGCCGGG
AACCTTGACGCTCAGCTCCCGCCCCGACGGCAGCGCCGCCGCCGCCAGAAATCCAGCCCAGAAATCCGACCGCCG
CGCCGGACGCGCGCTCTCCCGGGACAAGCGCAGGCTGCGATCCGAGGGGTGACACACACTCGCAGACGAGCCGC
CCCGAGGCGAAACCTCGCGGTTCTCTTCCCTTCCCTGCTGAGACTAAGACGTGGACAGGGGCCGCGCAGATCCG
GGGGAGGCTCCCAAATTGGAACCAGGCTTCTGGCTGCCCCCTTCCCTCCCGCCCCGTGGTGGAAAGAGCACTCCC
TTCCCTGGCCCCCTCATCCAGCCTCCGGTGCTGTAAACGCAGGCGCTGGGCCGCGGGCGGAGCTGAGGACAGGCC
TTGGCTGGTCCCAGGATGAGCGACGAGTTTGGTTTTAGCTGGGGATTGTGCTGGCATCCTGCGAAGCTCCTCCCA
GCCGGTCTCTCTGTGCTCGGTTGTCTTGGGGTGGGGCCATCCGCCGAGGTGGGGACCGATAGGAGAAGCCGGTG
GGTTGTACCCTTACACTTGTGGAGTCTCCTCTTGCCCTTACCTACTCCGCCTTTGTCTTAAGTTTTTGCAGGC
CAGTGCCAAACACACACTAAGTGTCTGGCCTCTCCGTGACACAAGTCTCTTCCAGCCTTCTCAGAGGCTTCT
GCCGCCCCCTCATCTCCACCCTCCCCATATCTGTTTGCATTAGGAGTTCACGACCATGGTGAATGTTAAGG
TGAACCCACCCCTTCTTACAGATGGGGACCCAGAGCCTGCTCTTGGGAACAGCCAGAGTAAGATTGGAACCCAG
ACTTGCACTCCAGCGCTGTTTGCATTAAGAGGGTGGGTGAGTCAGGACCCCTGGCTCAGGAGCCGCTCTCCTAA
AAGAGGGTTTTCAAGGCCAAATGGGTTTTGTCAACGGTGCTGTCTCCCTTCTTGGAGATGCTCATTAGCTTATCAA
AGACTGAGAAGTCCCGCTGTTACAGAAATAATTTAGTTTGTGCTGATTAACTGCTCCTGGGCCTGGAGCAGTATTC
CCACCTTAAGATTCCCAGCATCCCTGTGCTGTCCCGGCTCTCATTATGCCGAAGGGCCCAACCCATTGGCTGTG
TTCTGTTTGAAGATTGGGGGGCGCCTTCTCTTTCTTCCCCAGGGAATTCTCTAGCAGAGGGAGGGGACCCACCC
CAGTGAGGAAGTAGATTGCTGCCTCTAGCCAGAGACCTGAACTGGGGGAATTTGAACATTCCCTTTACATTGTTGGA
GAAATGAAGCCAAAGTTATTACAGATGGTTTTCCAGGCTAAAGGAAAGTCACCTGCAAGAGATCCCGGCACTGAT
CTGGAGCAGCTGACAGGGTGGGTCTCCCTTACCAAAGAGAAGAACCACTCTCTGGCGCTGGGGTGACCTGCTGGC
TGGGCCTGTAAGGTTTTCCATGTTGCTGAGGCCATGGAGATTCCCAGAGCTGGTACACCGACCGCTCTCAGGGCC
CGCTGCCCTGGGCTGGCAACACCATTTGGCCCTTGGCCTGCAGAACTTTCAGAGTCTTCACTGGCAGTAGGGGG
AGATGGGGAGAGGAATGATCTCTGCCCAGCCCCCTTCCCTTCCAAACCATGCAATGGAAGAGCCAGATGGGTGAA
GATTGATTTTGCCTTAAGTCAAGAGAAATTCCTGTTCTCCTTGTGCTATGATTTGGACACAAGATTCTGGATACCT
GGAACCTAGCTGTGTACTCCTGTACCCTAAACAGTGGATTGTAGTTCCAGCGTTTATTCTTTTTTCTTTTTTCA
GATCACCATCTAAGTTACATCTTTAGCTCAGGTCCATCCTTCTCAAGATCTCCTTCTTAGCCCCCAGCCCCCTGG
TGCTGTCTGTGGTACGGTGACCTTACTCAGGAGCAGATATCTCCTTGGCCGCCATGGAGCCTCATCCATCCACAC
GTGCCTGTAGCATTCAGAGCTCACTGCCCTTCTAGATGTGCCCTTCCCGCTTGGCTTCCAGCGGCTTGTGCTCAC
TCTGTCTGCCAGGTATGAGAAGAACACGTAAGACCGCCACCACACTCACCTCCCTCAAGGCCCTGTGCCATAGG
GGTGGCCACCCGACCTGCCCCAGAACTTTTGGATACTGGAGGCAGTTGCATAGGTCTCCCTCTCTGGGCACCAG
GACTCAGTCCAGCCCAAGACTACTCTGGGCAGTCCCATCCAGTCTGGGGCCATTTGCAGACTCAGGAAAGGAT
TTCTACAGTGTCTATAAAAGCCAAAAGAGAGAGTGGGTTTGGGAAGAGTGAGGGTGGTTGGGGAGAGGGGACCG
ATGTGCCTCATTTGTTAGTGGTGATTACAAATATGCTTTCTGGATAAAGTTTGGTTGTTTGTCTTAAAAAAA
AAAAAAAAAAAAAAGTCTCA

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FIGURE 3071

MLPPPPRQPPPPQARAARGAVRLQRPFLRSPLGVLRLQLLAGAAFWITIATSKYQGPVHFALFVSVLFWLLTLGL
YFLTLLGKHELVPVLGSRWLMVNVVAHDVLAALYGAATGIMSDQMRHSYCNLKDYLPCAYHAFLAAAVCGGVC
HGLYLLSALYGCGRRCQGKQEVA

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FIGURE 3072

GATGGAGCCCGACCATCCTTTCTACAGCAACATCAGTAAGGATCGCAGGTATGCAGACCTCACAGAAGATCAGCT
ACCCCTCCTGTGAGAGTCTGAAGGATACTATTGCCAGAGCTCTGCCCTTCTGGAATGAAGAAATAGTTCCCCAGAT
CAAGGAGGGGAAACGTGTACTGATTGCAGCCCATGGCAACAGCCTCCGGGGCATTGTCAAGCATCTGGAGGGTCT
CTCTGAAGAGGCTATCATGGAGCTGAACCTGCCGACTGGTATTCCCATTTGTCTATGAATTGGACAAGAACAAGTG
AAGGCCGGCGGGGAGGATACTGTCCCGAGTGCTTCCTGGTGTGTGATTAGAATCCCTTCCTGCCTTGTTTCATG
GCAGTGAAATGCCTCTTGGTCCTGTCCAAGTGATCTTTCACTGATTTCTGAATCATGTTCTAGTTGCTTGACCC
TGCCACATGGGTCCAGTGTTTCATCTGAGCATAACTGTACTAAATCCTTTTTCCATATCAGTATAATAAAGGAGTG
ATGTGCAATA

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FIGURE 3073

GGTTGAGGATGGGCTGGCGGGCGGGTCCGGGTCCGCTGCCCTGGCGCTGCGGGCGGGCGGGCCATGGTGGTTTGGATT
GAGCCGGGCCCCGGCCGGGGCGCCGAGTCGGAGGGGGTGGCAGTGAGCGGCGGCAGAGGCTACGGGGCTCGGTTTG
GCTGACTGGGGAGTCGGCAGGCGGCAGGAACCATGCGAGGCCAGCGGAGCCTGCTGCTGGGCCCCGGCCCGCCTCT
GCCTCCGCCTCCTTCTGCTGCTGGGTTACAGGCGCCGCTGTCCACCTCTACTCCGGGGTCTAGTACAGCGCTGGC
GCTACGGCAAGGTCTGCCTGCGCTCCCTGCTCTACAACTCCTTTGGGGGCGAGTGACACCGCTGTTGATGCTGCCT
TTGAGCCTGTCTACTGGCTGGTAGACAACGTGATCCGCTGGTTTGGAGTGGTGTTCGTGGTCTGGTGATCGTGC
TGACAGGCTCCATTGTAGCTATCGCCTACCTGTGTGCTCCTGCTCTCATCTCCGAACCTACTCAGTGCCACGAC
TCTGCTGGCATTCTTCTATAGCCACTGGAATCTGATCCTGATTGCTTCCACTACTACCAGGCCATCACCCTC
CGCCTGGGTACCCACCCCAGGGCAGGAATGATATCGCCACCGTCTCCATCTGTAAGAAGTGCAATTTACCCCAAGC
CAGCCCGAACACACCACTGCAGCATCTGCAACAGGTGTGTGCTGAAGATGGATCACCCTGCCCTGGCTAAACA
ATTGTGTGGGCCACTATAACCATCGGTACTTCTTCTCTTTCTGCTTTTTCATGACTCTGGGCTGTGTCTACTGCA
GCTATGGAAGTTGGGACCTTTTCCGGGAGGCTTATGCTGCCATTGAGAAAATGAAACAGCTCGACAAGAACAAAC
TACAGGCGGTTGCCAACCCAGACTTATCACCAGACCCACCACCCACCTTCTCCTTTGAGAAAGGATGACTCACA
AGAGTCTTGTCTACCTCTGGTTCCCTGTGCAGTTCTGTGGCACTTGCCCTGGGTGCCCTAACTGTATGGCATGCTG
TTCTCATCAGTCGAGGTGAGACTAGCATCGAAAGGCACATCAACAAGAAGGAGAGACGTCGGCTACAGGCCAAGG
GCAGAGTATTTAGGAATCCTTACAACCTACGGCTGCTTGGACAACCTGGAAGGTATTCCTGGGTGTGGATACAGGAA
GGCACTGGCTTACTCGGGTGCTCTTACCTTCTAGTCACTTGCCCCATGGGAATGGAATGAGCTGGGAGCCCCCTC
CCTGGGTGACTGCTCACTCAGCCTCTGTGATGGCAGTGTGAGCTGGACTGTGTGAGCCACGACTCGAGCACTCAT
TCTGCTCCCTATGTTATTTCAAGGGCCTCCAAGGGCAGCTTTTCTCAGAATCCTTGATCAAAAAGAGCCAGTGGG
CCTGCCTTAGGGTACCATGCAGGACAATTCAAGGACCAGCCTTTTACCCTGCAGAAGAAAGACACAATGTGGA
GAAATCTTAGGACTGACATCCCTTTACTCAGGCAAACAGAAGTTCCAACCCAGACTAGGGGTGAGGCAGCTAGC
TACCTACCTTGCCAGTGCTGACCCGGACCTCCTCCAGGATACAGCACTGGAGTTGGCCACCACCTCTTCTACTT
GCTGTCTGAAAAACACCTGACTAGTACAGCTGAGATCTTGGCTTCTCAACAGGGCAAAGATACCAGGCCTGCTG
CTGAGGTCAC TGCCACTTCTCACATGCTGCTTAAGGGAGCACAAATAAAGGTATTTCGATTTTTAAAGAT

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FIGURE 3074A

GGGCGGGAGGACTCGACTCGGTGGGAGCCGCTAGAGCCGGGCGCCCGGGGACGTAGCCTGTAGGGCCACCGGGT
CCCGTCAGAGGCGGGCGGGAGCAGCGGGGACTGCAGGCCGGGGTGCAGCGAACGCGACCCCGGGGCTGCGGC
CCGGTGTGTGCGGAGCGTGGCGGGCGCAGCTTACCGGGCGGAGGTGAGCGCGGCGCCGGCTCCTCCTGCGGCGGA
CTTTGGGTGCGACTTGACGAGCGGTGGTTTCGACAAGTGGCCTTGGCGGCGGATCGTCCAGTGGAAGAGTTGTA
AATTTGCTTCTGGCCTTCCCTACGGATTATACCTGGCCTTCCCTACGGATTATACTCAACTTACTGTTTAGAA
AATGTGGCCACGAGACGCTGGTTACTATCAAAAGGAGCGGGGTGACGGTCCCCACTTTCCCTGAGCCTCAG
CACCTGCTTGTGTTGAAGGGGTATTGAATGTGACATCCGTATCCAGCTTCTGTTGTGTCAAACAACATTGCAA
AATTGAAATCCATGAGCAGGAGGCAATATTACATAATTTAGTTCCACAAATCCAACACAAGTAAATGGGTCTGT
TATTGATGAGCCTGTACGGCTAAAACATGGAGATGTAATAACTATTATTGATCGTTTCCTTCAGGTATGAAAATGA
AAGTCTTCAGAATGGAAGGAAGTCAACTGAATTTCCAAGAAAAATACGTGAACAGGAGCCAGCAGCTCGTGTCTC
AAGATCTAGCTTCTCTCTGACCCTGATGAGAAAGCTCAAGATTCCAAGGCCTATTCAAAAATCACTGAAGGAAA
AGTTTCAGGAAATCCTCAGGTACATATCAAGAAATGTCAAAGAAGACAGTACCGCAGATGACTCAAAGACAGTGT
TGCTCAGGGAACAACTAATGTTTCTCCTCAGAACATGCTGGACGTAATGGCAGAAATGCAGCTGATCCATTTC
TGGGGATTTTAAAGAAATTTCCAGCGTTAAATTAGTGAGCCGTTATGGAGAATTGAAGTCTGTTCCCACTACACA
ATGCTTGTGACAATAGCAAAAAAATGAATCTCCCTTTTGGAAGCTTTATGAGTCAGTGAAGAAAGAGTTGGATGT
AAAATCACAAAAAGAAATGTCTACAGTATTGTAGAAAATCTGGATTACAACTGATTACGCAACAGAGAAAGA
AAGTGCTGATGGTTTACAGGGGAGACCCAACTGTTGGTCTCGCGTAAGTCAAGACCAAAATCTGGTGGGAGCGG
CCACGCTGTGGCAGAGCCTGCTTACCTGAACAAGAGCTTGACCAGAACAAGGGGAAGGGAAGAGACGTGGAGTC
TGTTCACTCCCAGCAAGGCTGTGGGCGCCAGCTTCCCTCTATGAGCCGGCTAAAATGAAGACCCCTGTACA
ATATTCACAGCAACAAATTTCTCCACAAAACATAAGAACAAGACCTGTATACTACTGGTAGAAGAGAATCTGT
GAATCTGGGTAAAGTGAAGGCTTCAAGGCTGGTGATAAACTCTTACTCCAGGAAGCTTTCAACTAGAAATCG
AACACCAGCTAAAGTTGAAGATGCAGCTGACTCTGCCACTAAGCCAGAAAATCTCTCTTCCAAAACAGAGGAAG
TATTCCTACAGATGTGGAAGTTCTGCCTACGGAAGCTGAAATTCACAATGAGCCATTTTTAACTCTGTGGCTCAC
TCAAGTTGAGAGGAAGATCCAAAAGGATTCCCTCAGCAAGCCTGAGAAAATTGGGCACTACAGCTGGACAGATGTG
CTCTGGGTTACCTGGTCTTAGTTCAAGTTGATATCAACAACCTTTGGTGATTCCATTAATGAGAGTGAGGGAATACC
TTTGAAGAAGAGCGTGTGTCTTTGGTGGGCACCTAAGACCTGAACTATTTGATGAAAACCTTGCCCTCTAATAC
GCCTCTCAAAGGGGAGAGCCCAACCAAAAGAAAGTCTCTGGTAATGCACACTCCACCTGTCTCTGAAGAAAAT
CATCAAGGAACAGCCTCAACCATCAGGAAAACAAGAGTCAGGTTTCAAGAAATCCATGTGGAAGTGAAGGCACAAAG
CTTGGTTATAAGCCCTCCAGCTCCTAGTCTTAGGAAAACCTCAGTTGCCAGTGATCAACGCCGTAGGTCTGCAA
AACAGCCCCTGCTTCCAGCAGCAATCTCAGACAGAGGTTCTTAAGAGAGGAGGGAGAAAGAGTGGCAACCTGCC
TTCAAAGAGAGTGTCTATCAGCCGAAGTCAACATGATATTTTACAGATGATATGTTCCAAAAGAAGAAGTGGTGC
TTCGGAAGCAAATCTGATTGTTGCAAAATCATGGGCAGATGTAGTAAACTTGGTGCAAAACAAACACAACTAA
AGTCATAAAACATGGTCTCAAAGGTCAATGAACAAAAGGCAAGAGACCTGCTACTCAAAGAAGCCTGTGGG
CGAAGTTCACAGTCAATTTAGTACAGGCCACGCAACTCTCCTTGTACCATAATAATAGGGAAAGCTCATACTGA
AAAAGTACATGTGCTGCTCGACCCTACAGAGTGCTCAACAACCTTCAATTTCCAACCAAAAAATGGACTTTAAGGA
AGATCTTTTCAAGGAATAGCTGAAATGTTCAAGACCCAGTGAAGGAGCAACCGCAGTTGACAAGCACATGTACAT
CGCTATTTCAAATTCAGAGAATTTGCTTGGAAAACAGTTTCAAGGAAGTGAATTCAGGAGAAGAACCTCTGCTCCC
CACCTCAGAGAGTTTTGGAGGAAATGTGTTCTTCAAGTGCACAGAATGCAGCAAAACAGCCATCTGATAAATGCTC
TGCAAGCCCTCCCTTAAGACGGCAGTGTATTAGAGAAAATGGAAACGTAGCAAAAACGCCAGGAACACCTACAA
AATGACTTCTCTGGAGACAAAACCTTCAGATACTGAGACAGAGCCTTCAAAAACAGTATCCACTGCAACAGGTC
AGGAAGGTCTACAGAGTTCAGGAATATACAGAAGCTACCTGTGGAAAGTAAAGAGTGAAGAAACAAATACAGAAAT
TGTTGAGTGCATCTTAAAGAGGTCAGAAGGCAACACTACTACAACAAAGGAGAGAGGAGAGATGAAGGAAAT
AGAAAGACCTTTTGAGACATATAAGGAAAATATTGAATTAAGAAAACGATGAAAAGATGAAAGCAATGAAGAG
ATCAAGAACTTGGGGGCAGAAATGTGCACCAATGTCTGACCTGACAGACCTCAAGAGCTTGCTGATACAGAACT
CATGAAAGACACGGCAGTGGCCAGAAATCTCCTCAAACCCAAGATCATGCCAAGGCACCAAGAGTGAAGAAAGG
CAAAATCACTAAAATGCCCTGCCAGTCATTACAACAGAAACCAATAAACACCCCAACACACACAAAACAACAGTT
GAAGGCATCCCTGGGGAAGTAGGTGTGAAAGAAGAGCTCCTAGCAGTCGGCAAGTTTACACCGGACGTGAGGGGA
GACCACGCACACGCACAGAGAGCCAGCAGGAGATGGCAAGAGCATCAGAACGTTTAAAGAGTCTCCAAAGCAGAT

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FIGURE 3074B

CCTGGACCCAGCAGCCCCGTGTAAGTGAATGAAGAAGTGGCCAAGAACGCCTAAGGAAGAGGCCAGTCACTAGA
AGACCTGGCTGGCTTCAAAGAGCTCTTCCAGACACCAGGTCCCTCTGAGGAATCAATGACTGATGAGAAAACCTAC
CAAAATAGCCTGCAAATCTCCACCACCAGAATCAGTGGACACTCCAACAAGCACAAAGCAATGGCCTAAGAGAAG
TCTCAGGAAAGCAGATGTAGAGGAAGAATTCTTAGCACTCAGGAACTAACACCATCAGCAGGGAAAGCCATGCT
TACGCCCAAACCAGCAGGAGGTGATGAGAAAGACATTAAAGCATTTATGGGAATCCAGTGCAGAACTGGACCT
GGCAGGAACCTTTACCTGGCAGCAAAAGACAGCTACAGACTCCTAAGGAAAAGGCCAGGCTCTAGAAGACCTGGC
TGGCTTTAAAGAGCTCTTCCAGACTCCTGGTACACCCGAGGAATTAGTGGCTGCTGGTAAAACCACTAAAATACC
CTGCGACTCTCCACAGTCAGACCCAGTGGACACCCCAACAAGCACAAAGCAACGACCCAAGAGAAGTATCAGGAA
AGCAGATGTAGAGGGAGAACTCTTAGCGTGCAGGAATCTAATGCCATCAGCAGGCAAAGCCATGCACACGCCTAA
ACCATCAGTAGGTGAAGAGAAAAGACATCATATTTGTGGGAATCCAGTGCAGAACTGGACCTGACAGAGAA
CTTAACCGGCAGCAAGAGACGGCCACAAACTCCTAAGGAAGAGGCCAGGCTCTGGAAGACCTGACTGGCTTTAA
AGAGCTCTTCCAGACCCCTGGTCATACTGAAGAAGCAGTGGCTGCTGGCAAACTACTAAAATGCCCTGCGAATC
TTCTCCACCAGAATCAGCAGACACCCCAACAAGCACAAAGAAGGCAGCCCAAGACACCTTTGGAGAAAAGGGACGT
ACAGAAGGAGCTCTCAGCCCTGAAGAAGCTCACACAGACATCAGGGGAAACCACACACAGATAAAGTACCAGG
AGGTGAGGATAAAAGCATCAACGCGTTTAGGGAACTGCAAAACAGAACTGGACCCAGCAGCAAGTGTAACTGG
TAGCAAGAGGCACCCAAAACTAAGGAAAAGGCCAACCCCTAGAAGACCTGGCTGGCTTGAAAGAGCTCTTCCA
GACACCAGTATGCACTGACAAGCCACGACTCACGAGAAAATACCAAATAGCCTGCAGATCACAACCAGACCC
AGTGGACACACCAACAAGCTCCAAGCCACAGTCCAAGAGAAGTCTCAGGAAAGTGGACGTAGAAGAAGAATTCTT
CGCACTCAGGAAACGAACACCATCAGCAGGCAAAGCCATGCACACACCCAAACCAGCAGTAAGTGGTGAGAAAA
CATCTACGATTTATGGGAATCCAGTGCAGAACTGGACCTGACAGAGAACTTAAGTGGCAGCAAGAGACGGCT
ACAACTCCTAAGGAAAAGGCCAGGCTCTAGAAGACCTGGCTGGCTTTAAAGAGCTCTTCCAGACACGAGGTCA
CACTGAGGAATCAATGACTAACGATAAACTGCCAAAGTAGCCTGCAAACTCTTCAACAACCAGACCCAGACAAAA
CCCAGCAAGCTCCAAGCGACGGCTCAAGACATCCCTGGGGAAGTGGGCGTGAAAGAAGAGCTCCTAGCAGTTGG
CAAGCTCACACAGACATCAGGAGAGACTACACACACACACAGAGCCAAACAGGAGATGGTAAGAGCATGAAAGC
ATTTATGGAGTCTCCAAAGCAGATCTTAGACTCAGCAGCAAGTCTAAGTGGCAGCAAGAGGCAGCTGAGAACTCC
TAAGGGAAAGTCTGAAGTCCCTGAAGACCTGGCCGGCTTCATCGAGCTCTTCCAGACACCAAGTCACACTAAGGA
ATCAATGACTAACGAAAAACTACCAAAGTATCCTACAGAGCTTCACAGCCAGACCTAGTGGACACCCCAACAAG
CTCCAAGCCACAGCCCAAGAGAAGTCTCAGGAAAGCAGACACTGAAGAAGAATTTTAGCATTTAGGAAACAAAC
GCCATCAGCAGGCAAAGCCATGCACACACCCAAACCAGCAGTAGGTGAAGAGAAAGACATCAACACGTTTTTGGG
AACTCCAGTGCAGAACTGGACCCAGCCAGGAAATTTACCTGGCAGCAATAGACGGCTACAACTCGTAAGGAAAA
GGCCAGGCTCTAGAAGAACTGACTGGCTTCAGAGAGCTTTTCCAGACACCATGCACTGATAACCCACGACTGA
TGAGAAAATACCAAAAAATACTCTGCAATCTCCGCAATCAGACCCAGCGGACACCCCAACAAACACAAAGCA
ACGGCCCAAGAGAAGCCTCAAGAAAGCAGACGTAGAGGAAGAATTTTAGCATTAGGAACTAACACCATCAGC
AGGCAAAGCCATGCACACGCCTAAAGCAGCAGTAGGTGAAGAGAAAGACATCAACACATTTGTGGGGACTCCAGT
GGAGAACTGGACCTGCTAGGAAATTTACCTGGCAGCAAGAGACGGCCACAACTCCTAAAGAAAAGGCCAAGGC
TCTAGAAGATCTGGCTGGCTTCAAAGAGCTCTTCCAGACACCAGGTCACTGAGGAATCAATGACCGATGACAA
AATCACAGAAGTATCCTGCAATCTCCACAACCAGACCCAGTCAAAACCCCAACAAGCTCCAAGCAACGACTCAA
GATATCCTTGGGGAAAGTAGGTGTGAAAGAAGAGGTCTTACCAGTCGGCAAGCTCACACAGACGTGAGGGAAGAC
CACACAGACACACAGAGAGACAGCAGGAGATGGAAGAGCATCAAAGCGTTTAAGGAATCTGCAAAGCAGATGCT
GGACCCAGCAAATATGGAATGGGATGGAGAGGTGGCCAAGAACACCTAAGGAAGAGGCCCAATCACTAGAAGA
CCTGGCCGGCTTCAAAGAGCTCTTCCAGACACCAGACCACTGAGGAATCAACAATGATGACAAAACCTACCAA
AATAGCCTGCAAATCTCCACCACCAGAATCAATGGACACTCCAACAAGCACAAAGGAGCGGCCCAAAACACCTTT
GGGGAAGAGGATATAGTGGAAGAGCTCTCAGCCCTGAAGCAGCTCACACAGACCACACACAGACAAAGTACC
AGGAGATGAGGATAAAGGCATCAACGTGTTTCAAGGAACTGCAAAACAGAACTGGACCCAGCAGCAAGTGTAAAC
TGGTAGCAAGAGGCAGCCAAGAACTCCTAAGGGAAAAGCCCAACCCCTAGAAGACTTGGCTGGCTTGAAAGAGCT
CTTCCAGACACCAATATGCACTGACAAGCCACGACTCATGAGAAAATACCAAAATAGCCTGCAGATCTCCACA
ACCAGACCCAGTGGGTACCCCAACAATCTTCAAGCCACAGTCCAAGAGAAGTCTCAGGAAAGCAGACGTAGAGGA
AGAATCCTTAGCACTCAGGAAACGAACACCATCAGTAGGGAAGCTATGGACACACCCAAACCAGCAGGAGGTGA

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FIGURE 3074C

TGAGAAAGACATGAAAGCATTATGGGAACTCCAGTGCAGAAATTGGACCTGCCAGGAAATTTACCTGGCAGCAA
AAGATGGCCACAAACTCCTAAGGAAAAGGCCAGGCTCTAGAAGACCTGGCTGGCTTCAAAGAGCTCTTCCAGAC
ACCAGGCACTGACAAGCCACGACTGATGAGAAAACCTACCAAAATAGCCTGCAAACTCCACAACCAGACCCAGT
GGACACCCAGCAAGCACAAAGCAACGGCCCAAGAGAAACCTCAGGAAAGCAGACGTAGAGGAAGAATTTTTAGC
ACTCAGGAAACGAACACCATCAGCAGGCAAAGCCATGGACACACCAAAACCAGCAGTAAGTGATGAGAAAAATAT
CAACACATTTGTGGAACTCCAGTGCAGAACTGGACCTGCTAGGAAATTTACCTGGCAGCAAGAGACAGCCACA
GACTCCTAAGGAAAAGGCTGAGGCTCTAGAGGACCTGGTTGGCTTCAAAGAACTCTTCCAGACACCAGGTACACAC
TGAGGAATCAATGACTGATGACAAAATCACAGAAGTATCCTGTAAATCTCCACAGCCAGAGTCATTCAAACCTC
AAGAAGCTCCAAGCAAAGGCTCAAGATACCCCTGGTGAAAGTGGACATGAAAGAAGAGCCCCCTAGCAGTCAGCAA
GCTCACACGGACATCAGGGGAGACTACGCAAACACACACAGAGCCAACAGGAGATAGTAAGAGCATCAAAGCGTT
TAAGGAGTCTCAAAGCAGATCCTGGACCCAGCAGCAAGTGTAACGGTAGCAGGAGGCAGCTGAGAATCGTAA
GGAAAAGGCCCGTGCTCTAGAAGACCTGGTTGACTTCAAAGAGCTCTTCTCAGCACCAGGTCACACTGAAGAGTC
AATGACTATTGACAAAAACAAAAATTCCTTGCAAATCTCCCCACCAGAACTAACAGACACTGCCACGAGCAC
AAAGAGATGCCCCAAGACACGTCCAGGAAAGAAGTAAAGAGGAGCTCTCAGCAGTTGAGAGGCTCAGCAAAC
ATCAGGGCAAAGCACACACACACAAAGAACCAGCAAGCGGTGATGAGGGCATCAAAGTATTGAAGCAACGTGC
AAAGAAGAAACCAAACCCAGTAGAAGAGGAACCCAGCAGGAGAAGGCCAAGAGCACCTAAGGAAAAGGCCCAACC
CCTGGAAGACCTGGCCGGCTTCACAGAGCTCTCTGAAACATCAGGTCACACTCAGGAATCACTGACTGCTGGCAA
AGCCACTAAAATACCCTGCGAATCTCCCCACTAGAAGTGGTAGACACCACAGCAAGCACAAAGAGGCATCTCAG
GACACGTGTGCAGAAGGTACAAGTAAAGAAGAGCCTTCAGCAGTCAAGTTCACACAAACATCAGGGGAAACCAC
GGATGCAGACAAAGAACCAGCAGGTGAAGATAAAGGCATCAAAGCATTGAAGGAATCTGCAAAACAGACACCGGC
TCCAGCAGCAAGTGTAAGTGGCAGCAGGAGACGGCCAAGAGCACCAGGGAAGTGCCCAAGCCATAGAAGACCT
AGCTGGCTTCAAAGACCCAGCAGCAGGTACACTGAAGAAATCAATGACTGATGACAAAACCACTAAAATACCCTG
CAAATCATCACCAGAACTAGAAGACACCGCAACAAGCTCAAAGAGACGGCCAGGACACGTGCCAGAAAGTAGA
AGTGAAGGAGGAGCTGTTAGCAGTTGGCAAGCTCACACAAACCTCAGGGGAGACCACGCACACCGACAAAGAGCC
GGTAGGTGAGGGCAAAGGCACGAAAGCATTAAAGCAACCTGCAAAGCGGAAGCTGGACGCAGAAGATGTAATTGG
CAGCAGGAGACAGCCAAGAGCACCTAAGGAAAAGGCCCAACCCCTGGAAGATCTGGCCAGCTTCCAAGAGCTCTC
TCAAACACCAGGCCACACTGAGGAACTGGCAATGGTGCTGCTGATAGCTTTACAAGCGCTCCAAAGCAAACACC
TGACAGTGGAAAACCTCTAAAAATATCCAGAAGAGTTCTTCGGGCCCCCTAAAGTAGAACCCGTGGGAGACGTGGT
AAGCACCAGAGACCCCTGTAAATCACAAAGCAAAGCAACACTTCCCTGCCCCCACTGCCCTTCAAGAGGGGAGG
TGGCAAAGATGGAAGCGTCACGGGAACCAAGAGGCTGCGCTGCATGCCAGCACCAGAGGAAATTGTGGAGGAGCT
GCCAGCCAGCAAGAAGCAGAGGGTTGCTCCAGGGCAAGAGGCAAATCATCCGAACCCGTGGTCATCATGAAGAG
AAGTTTGAGGACTTCTGCAAAAAGAAATTGAACCTGCGGAAGAGCTGAACAGCAACGACATGAAAACCAACAAAGA
GGAACACAAATTACAAGACTCGGTCCCTGAAAAATAAGGGAATATCCCTGCGCTCCAGACGCCAAAATAAGACTGA
GGCAGAACAGCAAATAACTGAGGTCTTTGTATTAGCAGAAAAGAAATAGAAAATAAACAGAAATGAAAAGAAGCCCAT
GAAGACCTCCCCAGAGATGGACATTCAGAATCCAGATGATGGAGCCCCGAAACCCATACCTAGAGACAAAGTCAC
TGAGAACAAAAGGTGCTTGAGGTCTGCTAGACAGAATGAGAGCTCCAGCCTAAGGTGGCAGAGGAGAGCGGAGG
GCAGAAGAGTGCGAAGGTTCTCATGCAGAATCAGAAAGGGAAAGGAGAAGCAGGAAATTCAGACTCCATGTGCCT
GAGATCAAGAAAGACAAAAAGCCAGCCTGCAGCAAGCACTTTGGAGAGCAAATCTGTGCAGAGAGTAACGCGGAG
TGTCAAGAGGTGTGCAGAAAATCCAAAGAAGGCTGAGGACAATGTGTGTGTCAAGAAAATAAGAACCAGAAGTCA
TAGGGACAGTGAAGATATTTGACAGAAAAATCGAACTGGGAAAAATATAATAAAGTTAGTTTTGTGATAAGTTCT
AGTGCAATTTTTGTGATAAATTACAAGTGAATCTGTAAAGTAAGGCTGTGAGTCTGCTTAAGGGAAGAAAACCTT
GGATTTGCTGGGTCTGAATCGGCTTCATAAACTCCACTGGGAGCACTGCTGGGCTCCTGGACTGAGAATAGTTGA
ACACCGGGGGCTTTGTGAAGGAGTCTGGGCCAAGGTTTGCCCTCAGCTTTGCAGAAATGAAGCCTTGAGGTCTGTC
ACCACCCACAGCCACCCTACAGCAGCCTTAAGTGTGACACTTGCCACACTGTGTCGTCGTTTGTGTTGCCTATGTC
CTCCAGGGCAGCGTGGCAGGAACAACTATCCTCGTCTGTCCCAACACTGAGCAGGCACTCGGTAAACACGAATGA
ATGGATGAGCGCACGGATGAATGGAGCTTACAAGATCTGTCTTTCCAATGGCCGGGGGCATTTGGTCCCCAAATT
AAGGCTATTGGACATCTGCACAGGACAGTCTATTTTTGATGTCTTTCTTTCTGAAAATAAAGTTTTGTGCTT
TGGAGAATGACTCGTGAGCACATCTTTAGGGACCAAGAGTGACTTTCTGTAAGGAGTGACTCGTGGCTTGCCCTT

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FIGURE 3074D

GTCTCTTGGAATACTTTTCTAACTAGGGTTGCTCTCACCTGAGACATTCTCCACCCGCGGAATCTCAGGGTCCC
AGGCTGTGGGCCATCACGACCTCAAACCTGGCTCCTAATCTCCAGCTTTCCTGTCAATTGAAAGCTTCGGAAGTTTA
CTGGCTCTGCTCCCGCTGTTTTCTTTCTGACTCTATCTGGCAGCCCCGATGCCACCCAGTACAGGAAGTGACACC
AGTACTCTGTAAAGCATCATCATCTTGGAGAGACTGAGCACTCAGCACCTTCAGCCACGATTTTCAGGATCGCTT
CCTTGTGAGCCGCTGCCTCCGAAATCTCCTTTGAAGCCCAGACATCTTCTCCAGCTTCAGACTTGTAGATATAA
CTCGTTTCATCTTCATTTACTTTCCACTTTGCCCTGTCTCTCTGTGTTCCCCAAATCAGAGAATAGCCCCGCCA
TCCCCAGGTCACCTGTCTGGATTCTCCCCATTACCCACCTTGCCAGGTGCAGGTGAGGATGGTGCACCAGAC
AGGGTAGCTGTCCCCAAAATGTGCCCTGTGCGGGCAGTGCCCTGTCTCCACGTTTGTTCCTCCAGTGTCTGGCG
GGGAGCCAGGTGACATCATAAATACTTGCTGAATGAATGCAGAAATCAGCGGTACTGACTTGTACTATATTGGCT
GCCATGATAGGGTTCTCACAGCGTCATCCATGATCGTAAGGGAGAATGACATTCTGCTTGAGGGAGGGAATAGAA
AGGGGCAGGGAGGGGACATCTGAGGGCTTCACAGGGCTGCAAAGGGTACAGGGATTGCACCAGGGCAGAACAGGG
GAGGGTGTTCAAGGAAGAGTGGCTCTTAGCAGAGGCACCTTTGGAAGGTGTGAGGCATAAATGCTTCCTTCTACGT
AGGCCAACCTCAAAACTTTTCAGTAGGAATGTTGCTATGATCAAGTTGTTCTAACACTTTAGACTTAGTAGTAATT
ATGAACCTCACATAGAAAAATTTTCATCCAGCCATATGCCTGTGGAGTGGAATATTCTGTTTAGTAGAAAAATCCT
TTAGAGTTCAGCTCTAACCCAGAAATCTTGCTGAAGTATGTCAGCACCTTTTCTCACCTGGTAAGTACAGTATT
CAAGAGCACGCTAAGGGTGGTTTTTCATTTTACAGGGCTGTTGATGATGGGTTAAAAATGTTTCATTTAAGGGCTAC
CCCCGTGTTTAATAGATGAACACCACTTCTACACAACCTCCTTGGTACTGGGGGAGGGAGAGATCTGACAAATA
CTGCCCCATTCCCCTAGGCTGACTGGATTGAGAACAAATACCCACCCATTTCCACCATGGTATGGTAACTTCTCT
GAGCTTCAGTTTCCAAGTGAATTTCCATGTAATAGGACATTCCCATTAATAACAAGCTGTTTTTACTTTTTTCGCC
TCCCAGGGCCTGTGGGATCTGGTCCCCAGCCTCTCTTGGGCTTTCTTACACTAACTCTGTACCTACCATCTCCT
GCCTCCCTTAGGCAGGCACCTCCAACCACCACACACTCCCTGCTGTTTTCCCTGCCTGGAACCTTTCCTCCTGCC
CCACCAAGATCATTTTCATCCAGTCTGAGCTCAGCTTAAGGGAGGCTTCTTGCCCTGTGGGTTCCCTCACCCCCAT
GCCTGTCTCCAGGCTGGGGCAGGTCTTAGTTTGCTGGAATTGTTCTGTACCTCTTTGTAGCACGTAGTGTTG
TGAAACTAAGCCACTAATTGAGTTTCTGGCTCCCCCTCCTGGGGTTGTAAGTTTTGTTTCATTCATGAGGGCCGAC
TGCATTTCTGTTACTCTATCCCAGTGACCAGCCACAGGAGATGTCCAATAAAGTATGTGATGAAATGGTCTT

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FIGURE 3075

CGCGGACGGGGCGCGGGCGGACGATGGAACCTCCACATCTGGAGCACC GGCTGCAAGTTGCCAGCGTCGCCAAGGA
GAGTATCCCGCTGTTTACCTACGGCCTGATCAAACCTTGCCCTTCTGTCTTCCAAGACCAGAAGATGATGATTATT
CTCCACCGTCTAAGAGACCAAAGGCCAATGAGCTACCGCAGCCACCAGTCCCAGAACCCGCCAATGCTGGGAAGC
GGAAAGTGAGGGAGTTCAACTTCGAGAAATGGAATGCTCGCATCACTGATCTACGTAAACAAGTTGAAGAATTGT
TTGAAAGGAAATATGCTCAAGCCATAAAAGCCAAAGGTCCGGTGACGATCCCGTACCCTCTTTTCTAGTCTCATG
TTGAAGATCTTTATGTAGAAGGACTTCTGAAGGAATTCTTTTAGAAGGCCATCTACTTACGGAATTCTCGCC
TGGAGAGGATATTACTTGCAAAGGAAAGGATTCTGTTTTGTGATTAAAGAAACATGAGCTTCTGAGTTCAACACGTG
AAGATTTACAGCTTGATAAGCCAGCTTCAGGAGTAAAGGAAGAATGGTATGCCAGAATCACTAAATTAAGAAAGA
TGGTGGATCAGCTTTTCTGCAAAAAATTTGCGGAAGCCTTGGGGAGCACTGAAGCCAAGGCTGTACCGTACCAA
AATTTGAGGCACACCCGAATGATCTGTACGTGGAAGGACTGCCAGAAAACATTCTTTCCGAAGTCCCTCATGGT
ATGGAATCCCAAGGCTGGAAAAAATCATTCAAGTGGGCAATCGAATTAAATTTGTTATTAAAGACCAGAACCTTC
TGACTCACAGTACCCTGAAGTTACTCAGCCAAGAACGAATACACCAGTCAAAGAAGATTGGAATGTCAGAATTA
CCAAGCTACGGAAGCAAGTGGAAGAGATTTTAAATTTGAAATTTGCTCAAGCTCTTGGACTCACCGAGGAGTA
AAGTACCATATCCTGTGTTTGAATCAAACCCGAGTCTTGTATGTGGAAGGCTTGCCAGAGGGGATTCCCTTCC
GAAGCCCTACCTGGTTTGAATTCACGACTTGAAAGGATCGTCCACGGGAGTAATAAAATCAAGTTCGTTGTTA
AAAAACCTGAAGTAGTTATTTCTTACTTGCCCTCTGGGATGGCTAGTAAATAAAACTAAAGCTTTGACAGTCCC
CCAAAAGACCACGAAGTCTGGGAGTAATTCAAAGGTCTGAAATTGAGGTACCGTGGAAGGCCCTAATAACA
ACAATCCTCAAACCTCAGCTGTTGAACCCGACCCAGACTAACGGTTCTAACGTTCCCTTCAAGCCACGAGGGA
GAGAGTTTTCTTTGAGGCCTGGAATGCCAAAATCACGGACCTAAACAGAAAGTTGAAAATCTCTTCAATGAGA
AATGTGGGGAAGCTCTTGGCCTTAAACAAGCTGTGAAGGTGCCGTTTCGCGTTATTTGAGTCTTTCCCGGAAGACT
TTTATGTGGAAGGCTTACCTGAGGGTGTGCCATTCCGAAGACCATCGACTTTTGGCATTCCGAGGCTGGAGAAGA
TACTCAGAAACAAAGCCAAAATTAAGTTCATCATTAAAAAGCCGAAATGTTTGAGACGGCGATTAAGGAGAGCA
CCTCCTCTAAGAGCCCTCCCAGAAAAATAAATTCATCACCCAATGTTAATACTACTGCATCAGGTGTTGAAGACC
TTAACATCATTACAGGTGACAATTCCAGATGATGATAATGAAAGACTCTCGAAAGTTGAAAAAGCTAGACAGCTAA
GAGAACAAGTGAATGACCTCTTTAGTCGGAATTTGGTGAAGCTATTGGTATGGGTTTTCTGTGAAAGTTCCCT
ACAGGAAAAATCACAATTAACCCCTGGCTGTGTGGTGGTTGATGGCATGCCCCGGGGGTGTCCTTCAAAGCCCCCA
GCTACCTGGAAATCAGCTCCATGAGAAGGATCTTAGACTCTGCCGAGTTTATCAAATTCACGGTCAATTAGACCAT
TTCCAGGACTTGTGATTAATAACCAGCTGGTTGATCAGAGTGAGTCAAAAGGCCCGTGATACAAGAATCAGCTG
AACCAGCCAGTTGGAAGTTCCAGCCACAGAAGAAATAAAAGAGACTGATGGAAGCTCTCAGATCAAGCAAGAAC
CAGACCCACGTTGGTAGACCTCTTCCCTCCTAGGCTTAAAGTATCAGTGTTGAGAAGAGCTTTTCGGACCTGTT
ACTACCCCAAGCTGTGTAATATACTTGTATAACAGAAATACCTTCTATACAAACCTTTTTTTTCTACTTTTAGATA
GAAATGTCTACTTTTTTACAGCAGTTCTGTGAATTAAAGAGCAGAGTGACTGTGGGTCTGGAATGGCTGGTGTACTT
GGGAATGTACTATCAGGATTTTACAGCAATGCTGGGAAATGACAGGGAAAATGACAGGAATGAATCTCACCAGAT
TTTTTATGTACTCAGCAGAGCCTTGAGTTACGGTGTATTTTCCAATCAAGTGAAGATATCTCCTACTTCTCCT
ACTGGAACATCTCAGCTTCTGCAGTGAAGAAAAATTCCTGTGATAGTTTCAAGTTCTTTAGTTTTCTATTTGAAAA
AAAAAAATCATTTAAATGATCCTTTGTTACGGCTCTCCTTAATGACTGAGTGAACAGTTTCTATCTGTATATT
GACTAAACCTTTTCTAAGCTATCTCTCATGGTTTCTATGTTTTTTTATCATAATTAAAGCAAACCATCTGGA
TCACCTAACAGTCAGAGGTCAGTATCTCAGCGTGTGAATTATAGAGGAAATACAGAGAGAACCTCTTCCACTTTT
ACTTTTCGTCCAAATAAAATGCATGGTGTACCAGAAGTTGAAGATCGGGTTGAGGATTGGGGCTAGCTCGATGAC
ACTAAGGCCCAACATCGCGGGACCTGCTGTGGCGCGGATTCTTAGGAACGCTGTTCTAGCCGGCCCCCTCTCCA
GGGGTCGCCGTGGCCGGCATTATTTCTAGTTCTTCTTGTAAACCTGAGGTGCCAGCGCGGGGAGTGAGGAGGGG
TCAGGGGGCTAAGGATGCAACCTCTGACGTTCTGCGCCTTCCTAGGAGAGTCTTACATGTGTTGAGATTTACAA
GCAATGCGAGTTGTAAAATACCAGCTCTACAAGAAGCTAGGCTCTGTGACGGCATAGTTTTTCACTAGCTTTATCA
CAATATTACAATGGAGAATTATATGACATGGTAGCAGAAATAGGCCCTTTTATGTGTTGCTTCTATTTTACCTC
AAATTGTAGATATAGGGTAATCAATAAAATCCATCCATGCCTTTTACACACT

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FIGURE 3076

AATTCTGTCTCAGGCGCTGTCAGATCTGTGGTTTTTCTACTTGAAGGACACAATGTTTTCCAAACTAGCACAT
TTGCAGAGGTTTTGCTGTACTTAGTCGCGGAGTTTCACTTTCAGTGGCTTCTGCTACATCTGTTGCAACTAAAAAA
ACAGTCCAAGGCCCTCCAACCTCTGATGACATTTTTGAAAGGGAATATAAGTATGGTGCACACAACTACCATCCT
TTACCTGTAGCCCTGGAGAGAGGAAAAGGTATTTACTTATGGGATGTAGAAGGCAGAAAAATATTTTGACTTCCTG
AGTTCTTACAGTGCTGTCAACCAAGGGCATTGTCACCCCAAGATTGTGAATGCTCTGAAGAGTCAAGTGGACAAA
TTGACCTTAACATCTAGAGCTTTCTATAATAACGTACTTGGTGAATATGAGGAGTATATTACTAACTTTTCAAC
TACCACAAAGTTCTTCCTATGAATACAGGAGTGGAGGCTGGAGAGACTGCCTGTAACTAGCTCGTAAGTGGGGC
TATACCGTGAAGGGCATTTCAGAAATACAAAGCAAAGATTGTTTTTGAGCTGGGAACTTCTGGGGTAGGACGTTG
TCTGCTATCTCCAGTTCCACAGACCCAACCAGTTACGATGGTTTTGGACCAATTTATGCCGGGATTCGACATCATT
CCCTATAATGATCTGCCCGCACTGGAGCGTGCTCTTCAGGATCCAAATGTGGCTGCGTTTCATGGTAGAACCAATT
CAGGGTGAAGCAGGCGTTGTTGTTCCGGATCCAGGTTACCTAATGGGAGTGCAGAGAGCTCTGCACCAGGCACCAG
GTTCTCTTTATTGCTGATGAAATACAGACAGGATTGGCCAGAAGTGGTAGATGGCTGGCTGTTGATTATGAAAAAT
GTCAGACCTGATATAGTCCTCCTTGGAAGGCCCTTTCTGGGGGCTTATACCTGTGTCTGCAGTGCTGTGTGAT
GATGACATCATGCTGACCATTAAGCCAGGGGAGCATGGGTCCACATACGGTGGCAATCCACTAGGCTGCCGAGTG
GCCATCGCAGCCCTTGAGGTTTTAGAAGAAGAAAACCTTGCTGAAAATGCAGACAAATTGGGCATTATCTTGAGA
AATGAACTCATGAAGCTACCTTCTGATGTTGTAAGTCCGTAAGAGGAAAAGGATTATTAAACGCTATTGTCATT
AAAGAAACCAAAGATTGGGATGCTTGGAAGGTGTGTCTACGACTTCGAGATAATGGACTTCTGGCCAAGCCAACC
CATGGCGACATTATCAGGTTTGCCTCCGCTGGTGATCAAGGAGGATGAGCTTCGAGAGTCCATTGAAATTATT
AACAAGACCATCTTGCTTTCTGAGGGTAGCCAGCTGTTTTCAGTGGTCCCTGGGAGCCAGCTGGAGACAGGTGG
TCCTGTAAAAGCTTTATTCTAATGTGGGCACATTCCACTCCCATGAGTCTTCAAAAACTTTTTTTTTGAATATA
TTTTTTTTCAGTTGATACATAATAGAACAACGTTTATGAACCTGCCGTTTGCTTTGTAACGTAATAAATAATGTA
ATGGCATCTATATTCAGTTGAAGTGTTTTGATGTGCATGTGTACTTCCTAAGGTGAAATGCATCTATATACAGAC
AGCCTCTAAATCAAGTCCTTCAGTATAATTGATATATGTTTTTATAATTTCCTCACTGGTATAAGTGTTTCATAT
TTGAAAAAGTTATCTCTGGGTATTGCATAAAAGGCTTCATCTTATAAAGTGAATCATTGTTATTGAATTTTAGG
AAGGATTAATGGTTAAGTGTATATAAAATACTAATATTAAGTAACTTCATATTGGCCAACACCAGGGTTGTATT
CTATGGATGTCATTATTTTGAATTAAGAATTAGTGTTTAAACATTCCTAAATTGTTTTGAGTGCTTGATTATAATT
TGAAAAAATGTTTATTTTCAATACTCTTTAAATTTAAAATAAAGCTTATATTTCAAATGTC

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FIGURE 3077

MFSKLAHLQRFAVLSRGVHSSVASATSVATKKTVQGPPTSDDIFEREYKYGAHNYHPLPVALERKGKIYLWDVEG
RKYFDFLSSYSAVNQGHCHPKIVNALKSQVDKLTLSRAFYNNVLGEYEEYITKLFNYHKVLPMTGVEAGETAC
KLARKWGYTVKGIQKYKAKIVFAAGNFWGRTLSAISSSTDPTSVDGFGPFMPGFDIIPYNDLPALERALQDPNVA
AFMVEPIQGEAGVVVPDPGYLMGVRELCTRHQVLFIADEIQTGLARTGRWLAVDYENVRPDIVLLGKALSGGLYP
VSAVLCDDDIMLTIKPGEHGSTYGGNPLGCRVAIAALEVLEEENLAENADKLGII LRNELMKLPSDVVTAVRGKG
LLNAIVIKETKDWDWKVCLRLRDNGLLAKPTHGDIIRFAPPLVIKEDELRESIEIINKTILSF

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FIGURE 3078

GCCGCCGCCGCCACACCGGCCCTTCGGGAGCGTCTGAGGAGGCGCGGGCCGCTGCGGGCTCGGGCGCCGACGCGC
GCCGGCCCGAGCCCTGGACGAGGCCACGGAGCCGCTCGCCCCGACCCAGCCGCCGATGTCCTCAAAATGGAG
GCAGCGGGGGCGCGCGCTGAAGAAAGCGCGCTGTGGCGCGGGAGTAGGGGCCCGGGCGGAGCGGTGGCGGG
ATGGGGCTGCTGCTCATGATCCTGGCGTCGGCCGTGCTGGGTTCCTTCCTCACGCTCCTCGCCAGTTCCTCCTG
CTGTACCGCAGACAGCCCGAGCCGCCGGGACGAGGCCGCCCGCGCGGGCGAGGGCTTCGGCTACATCAAGCCA
GTGCCGGGCTGCTCCTAAGGGAGTACCTTTATGGCGGGCGCGGGATGAGGAGCCCTCCGGAGCGGCCCTGAG
GGCGGCGCGACCCCCACCGCGGCCCGGAGACCCCCGCCCGCGACGCGGGAGACTTGCTACTTCCTCAACGCC
ACCATCCTATTCTGTTCCGGGAGTTGCGGGACACCGCGCTGACCCGCGCTGGGTACCAAGAAGATCAAGGTG
GAGTTCGAGGAGCTGCTGCAGACCAAGACGGCCGGGCGCTGCTGGAGGGGCTGAGCCTGCGGGACGTGTTCTCTG
GGCGAGACGGTGCCCTTCATCAAGACCATCCGGCTCGTGCGGCCAGTCGTGCCCTCGGCCACCGGGGAGCCCGAT
GGCCCTGAAGGGGAGGCGCTGCCCGCGCCTGCCCGAGGAGCTGGCCTTCGAGGCGGAGGTGGAGTACAACGGG
GGCTTCCACCTGGCCATCGACGTGGACCTGGTCTTCGGCAAGTCCGCCTACTTGTTTGTCAAGCTGTCCCGCGTG
GTGGGAAGGCTGCGCTTGGTCTTTACGCGCGTGCCCTTACCCACTGGTTCTTCTCCTTCGTGGAAGACCCGCTG
ATCGACTTCGAGGTGCGCTCCAGTTTGAAGGGCGGCCATGCCCGAGCTCACCTCCATCATCGTCAACCAGCTC
AAGAAGATCATCAAGCGCAAGCACACCCTACCGAATTACAAGATCAGGTTGAATTAATAAAAGGAAATTTACAAA
GTGTTGGACTTACACTTCGTCTTGTCCAGTCAACTGATGGGTATGCTGGGCACGTATCATTGAAACTGTGGCTC
CAAACCTCGCTGCTGCAATTGCAGATCTTCAGCGGGGAGATCGACTTATCGCCATTGGAGGTGTGAAAATCACAT
CAACACTGCAAGTGTGAAGCTTATCAAGCAGGCTGGTGACCGAGTCCTGGTGTACTATGAAAGGCCTGTTGGCC
AGAGTAATCAAGGTGCAAGTGTGCAAGATAACTTTGGCCAGTTGGAAGAAAACCTTTTTGTCAAGCTCATGCCAAT
CGGGTTATGAAGAGGAAGCTGCCGGGTTGACAGTAGATACTGAAAGTAGAGAGCTGGATTCTGAATTTGAAGACT
TGGCAAGTGATGTCAGAGCACAAAATGAGTTCAAAGATGAGGCACAATCATTAAAGTCATAGTCCCAAACGTGTTT
CAACAACACTTTCTATTAAACCCCTTGGAGCTATATCACCAGTTTTTAAACCGTAAATTAGCTGTAGGAAGTCACC
CACTACCACCGAAAATTAGTCCAAAGATGGAAATAAACCTCCACCCCTAAAAACTTCTGAGATAACAGACCCAG
CACAAGTGTCAAAACCAACCCAAGGATCTGCTTCAAACCACCTGTGCCACCACGACCACAAGCGAAAGTTCCTT
TGCCTTCCGCCGATGCTCCAAATCAGGCAGAACCAGATGTTCTCGTTGAAAAGCCAGAGAAGGTGGTGCCACCTC
CTCTTGTAGATAAATCTGCTGAAAAGCAAGCAAAAAATGTGGATGCCATAGACGATGCAGCTGCACCTAAGCAAT
TTTTAGCAAAGCAAGAAGTGGCCAAAGATGTCACCTTCAGAACTTCCTGCCCTACTAAGGACAGTTCGGACGACC
GTCAAACATGGGAATCATCAGAAATTCCTTATCGTAATAAGCTAGGAAAAATGGACAAGAACCAGAGCATCCTGTT
TGTTTGACATAGAAGCCTGTCACAGGTACTTAAACATTGCATTGTGGTGCAGGGATCCTTTCAAGTTGGGAGGTC
TCATCTGTTTGGGGCATGTTAGTTTAAACTTGAAGATGTGGCTTAGGATGCCTAGCTACATCAAACACGGAAT
ACCTTTCCAAATTGAGACTGGAAGCCCCCTCACCTAAGGCTATAGTCACTAGAACCGCACTACGCAATCTGAGTA
TGCAAAAGGGATTCAATGACAAATTTGCTATGGTGACATTACTTCACTTCAAATATTTGAAAGAAGGAGAAT
CAGACCACCATGTAGTTACTAACGT

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FIGURE 3079

MGLLLMILASAVLGSFLTLLAQFFLLYRRQPEPPADEAARAGEGFRYIKPVPGLLLREYLYGGGRDEEPSGAAP
GGATPTAAPETPAPPTRETCYFLNATILFLFRELRDTALTRRWVTKKIKVEFEELLQTKTAGRLLEGLSLRDVFL
GETVPFIKTIRLVVPVPSATGEPDGPEGEALPAACPEELAFEAEVEYNGGFHLAIDVDLVFGKSAYLFVKLSRV
VGRRLRVFTRVPFTHWFFSFVEDPLIDFEVRSQFEGRPMPQLTSIIVNQLKKIKRKHTLPNYKIRLN

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FIGURE 3080

AATCAAGAGGTTCCAATCTTTGTGTTCACTTTAAGAACACCATGAAACTGCTCAGGCCATCAAGGGTATACATAT
ATGAAAAGCCAAGAAGTATCTGAAAGATGTCACTTTACAGAAACAGTGTGTACCATTCTACGTTACAATGGTGG
AGTTAGCAGGTGTACGCAGGCCAAGCAGTGGGGCTGGACACAAGGTCGGTGGCCCAAAAAGAGTGCTGAATTCTC
TGGTCATTGAGCACATCCAAGTGAACAAAACACCTAAGATGCGCCGCCGACCCACAGAGCTCATGGTCGGATTA
ACCCATACATGAGCTCTCCCTGCCACATTGAGATGATCCTTACGGAAAAGGAACAGATTGTTCTAAATCAGAAG
AGGAGGTTGCCCAGAAGAAAAAGATATCCCAGAAGAACTGAAGAAACAAAACTTATGGCACAGGAGTAAATTC
AGCATTAAATAAATGTAATTAAAGG

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FIGURE 3081

MSLYRNSVYHSYVTMVELAGVRRPSSGAGHKVGGPKRVLNSLVIEHIQVNKTPKMRRRTHRAHGRINPYMSSPCH
IEMILTEKEQIVPKSEEEVAQKKKISQKKLKKQKLMAQE

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FIGURE 3082A

GGCGACTGCTGGCGAGGCGCGTGGGACCTTACGCTGGTTCCCTTCGTCTCCTCTCCCGGCCCGGCCACTAGAG
AGTTTCGCTGACGCCGGGTGAGCTGAGCCTGCCGCCAAGATGCCGGCCTATTTTCAGAGGCCGGAAAAATGCCCTCA
AACCGCCCAACGAATTTCTTGAGGTTGGCAAAAAGCAGCCTGCTCTGGATGTTCTTTATGATGTTATGAAAAGTA
AAAAACATAGAACATGGCAAAAGATACACGAACCAATTATGTTGAAATACTTGGAACCTTTCGTGGATCTTCGCA
AGAGCCACTTGGCAAAAGGAGGGGTTATACAGTATAAGAACATTTGTCAACAGGTGAACATAAAATCTCTGGAGG
ATGTTGTTAGGGCATATTTGAAAATGGCAGAGGAAAAAACTGAAGCTGCTAAAGAAGAATCTCAGCAGATGGTCT
TAGATATAGAGGATCTAGATAATATTCAAACCTCTGAGAGTGTTCCTAAGTCTGTAAGTGGTGAAGACACTC
AGGATCGTACTGACAGATTACTTTTAACTCCATGGGTTAAATTCCTGTGGGAGTCTTACAGGCAGTGTGTTGGACC
TTCTTAGAAACAATTCTAGAGTAGAGCGCCTGTACCATGATATTGCCAGCAAGCTTTCAAATCTGCCTCCAAT
ACACGCGTAAGGCTGAATTCCGTAAACTGTGTGACAATTTGAGAATGCACCTTATCGCAGATTACAGCGCCACCATA
ACCAAAGTACGGCAATCAATCTTAATAATCCAGAGAGCCAGTCCATGCAATTTGAAACCAGACTTGTTCAGCTGG
ACAGTGTATCAGCATGGAATTGTGGCAGGAAGCATTCAAAGCTGTGGAAGATATTCACGGGCTATTCTCCTTGT
CTAAAAAACCACTAAACCTCAGTTGATGGCAAATTACTATAACAAAGTCTCAACTGTGTTTTGGAAATCTGGAA
ATGCTCTTTTTCATGCATCTACACTCCATCGTCTTTACCATCTCTCTAGAGAAATGAGAAAGAATCTCACACAAG
ATGAGATGCAAAGAATGTCTACTAGAGTCCTTTAGCCACTCTTTCCATCCCTATTACTCCTGAGCGTACGGATA
TTGCTCGACTTCTGGATATGGATGGCATTATAGTTGAAAAACAGCGTCGCTTGCAACACTACTAGGTCTTCAAG
CCCCACCGACACGAATTGGCCTTATTAATGATATGGTCAGATTTAATGTACTACAATATGTTGTCCAGAAGTGA
AAGACCTTTACAATTGGCTTGAAGTAGAATTTAACCATTAAAACTCTGTGAGCGAGTCACAAAGGTTCTAAATT
GGGTTAGGGAACAACCTGAAAAGGAACCGGAATTGCAGCAGTATGTGCCACAACCTGCAAAACAACACCATCCTCC
GCCTTCTGCAGCAGGTGTACAGATTTATCAGAGCATTGAGTTTCTCGTTTGACTTCTTTGGTTCTTTTTGTTG
ATGCTTTCCAACCTGGAACGGGCCATAGTAGATGCAGCCAGGCATTGCGACTTGCAGGTTCTGATTGATCACACTT
CTCGGACCCTGAGTTTTGGATCTGATTGAATTATGCTACTCGAGAAGATGCTCCGATTGGTCTCATTTGCAAA
GCATGCCTTCAGAGCAGATAAGAAACCAGCTGACAGCCATGTCTCAGTACTTGCAAAAGCACTTGAAGTCATTA
AACCAGCTCATATACTGCAAGAGAAAGAAGAACAGCATCAGTTGGCTGTCACTGCATACCTTAAAAATTCACGAA
AAGAGCACCAGCGGATCCTGGCTCGCCGCCAGACAATTGAGGAGAGAAAAAGAGCGCCTTGAGAGTCTGAATATTC
AGCGTGAGAAAGAAGAATTGGAACAGAGGGAAGCTGAACCTCCAGAAAGTGCGGAAGGCTGAGGAAGAGAGGCTGC
GCCAGGAAGCAAAGGAGAGAGAGAAGGAGCGTATCTTACAGGAACATGAACAAATCAAAAAGAAAACCTGTCCGAG
AGCGTTTGGAGCAGATCAAGAAAACAGAACTGGGTGCCAAAGCATTCAAAGATATTGATATTGAAGACCTTGAGG
AATTGGATCCAGATTTTATCATGGCTAAACAGGTTGAACAACCTGGAGAAAAGAAAAGAAAGAACTTCAAGAACGCC
TAAAGAATCAAGAAAAGAAGATTGACTATTTTGAAAGAGCCAAACGTTTGGAGAAAATTCCTTTGATAAAGAGCG
CTTACGAGGAACAGAGAATTAAAGACATGGATCTGTGGGAGCAACAAGAGGAAGAAAAGAATTACTACAATGCAGC
TAGAACGTGAAAAGGCTCTTGAACATAAGAATCGAATGTACCAATGCTTGAAGACAGAGATTTATTCGTAATGC
GACTCAAAGCTGCACGGCAGTCTGTTTATGAGGAAAAACTTAAACAGTTTGAAGAGCGATTAGCAGAAGAAAGGC
ATAATCGATTGGAAGAACGGAAGGCAGCGTAAAGAAGAACGCAGGATAACATACTATAGAGAAAAAGAAGAGG
AGGAGCAGAGAAGGGCAGAAGAACAATGCTAAAAGAGCGGGAAGAGAGAGAGCGCGCCGAACGAGCAAAACGCG
AGGAAGAGCTACGAGAGTATCAGGAGCGGGTGAAGAAATTAGAAGAAGTGGAAAGGAAAAAACGCCAAAGGGAGT
TGGAAATTGAAGAACGAGAACGGCGTAGAGAGGAAGAGAGAAGACTTGGCGATAGTTCCTTTCTAGAAAGGACT
CTCGTTGGGGAGATAGAGATTGAGAAGGCACCTGGAGAAAAGGACCTGAAGCAGATTCTGAGTGGAGAAGAGGCC
CGCCAGAGAAGGAGTGGAGACGTGGAGAAGGGCGAGATGAGGACAGGTCTCATAGAAGAGATGAAGAGCGGCCCC
GGCGTCTGGGGGATGATGAAGATAGAGAGCCCTCTCTTAGACCAGACGATGATCGGGTTCCCCGGCGTGGCATGG
ATGATGACAGAGGCCCTAGACGTGGTCTTGAGGAAGATAGGTTCTCTCGTCTGGGGCAGACGATGACCGGCCCTT
CCTGGCGTAACACAGATGATGACAGGCCCTCCAGACGAATTGCCGATGAAGACAGGGGAACTGGCGTCAATGCGG
ATGATGACAGACCACCTAGACGAGGACTGGATGAGGACAGAGGAAGCTGGCGAACAGCTGATGAGGACAGAGGAC
CAAGACGTGGGATGGATGATGACCGGGGGCCGAGGCGAGGAGGCGCTGATGATGAGCGATCATCTTGGCGTAATG
CTGATGATGACCGGGGTCCCAGGCGAGGGTTGGATGATGATCGGGGTCCCAGGCGAGGCGATGGATGATGACCGGG
GTCCCAGGCGAGGCGATGGATGATGACCGGGGTCCCAGGCGAGGCGATGGATGATGACCGGGGTCCCAGGCGAGGGT
TGGATGATGATCGAGGACCTTGGAGGAACGCCGATGATGACAGAATTCCCAGGCGTGGTGACAGGATGACAGGG
GCCCTTGGAGAAACATGGATGATGATCGCCTTTCAAGACGTGCTGATGATGATCGGTTTCCCAGACGGGGTGTG

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FIGURE 3082B

ACTCAAGACCTGGTCCTTGGAGACCATTAGTCAAGCCAGGTGGATGGAGAGAGAAAGAAAAAGCCAGAGAGGAGA
GCTGGGGTCCACCTCGAGAATCAAGGCCATCAGAAGAACGTGAATGGGACAGAGAAAAAGAAAGGGACAGAGATA
ATCAAGATCGGGAGGAGAATGACAAGGACCCTGAGAGAGAAAGGGACAGAGAGAGAGATGTGGATCGAGAGGATC
GCTTCAGAAGACCTAGGGATGAAGGTGGCTGGAGAAGAGGACCAGCTGAGGAATCTTCAAGCTGGAGAGACTCAA
GTCGCCGGGACGATAGGGATAGGGATGACCGTCGCCGTGAGAGGGATGACCGGCGTGATCTAAGAGAAAGACGAG
ATCTAAGAGACGACAGGGACCGAAGAGGACCTCCACTCAGATCAGAACGTGAAGAAGTAAGTTCTTGGAGACGTG
CTGATGACAGGAAAGATGACCGGGTGAAGAGCGGGACCCTCCTCGTCGAGTTCCTCCCCAGCTCTTTCAAGAG
ACCGAGAAAGAGACCGAGACCGAGAAAGAGAAGGTGAAAAAGAGAAGGCCCTCATGGAGAGCTGAGAAAGATAGGG
AATCTCTCCGTCGTACTAAAAATGAGACTGATGAAGATGGATGGACCACAGTACGACGTTAAGCTCTCAAGATAAT
GGATTTAAACTGGTGTCTTAAATAGGTTTGATCACATTCAAGGATTATTATACTTGTGCTTCAACCAATCTAAAT
TGGATTCTTTAATGTTGTTTCACCATAACACAAAAAGCATGAACCTGTATTATCCTATATAATAGATTGATCAT
GCACCATATCCACAGGAGGTTGGAAAAACCATGCCATTTTCTGGAATTTAAGGGTGTTCATTATTTCATCAATC
ATTTGTTGACAAAAAGAAAACTAAAAATAAATTTAAATGTGACCCTTCAGGTATTGAGTAACACCTTTATC
TTGGTATAGAACTGATACTTTTTTTTTTGATTTTGAAATATCTGATAATAATTTGGAATGAAGTAAGGTTCTGTIA
AAATATATTTGAAGACCCTTTAAAGCAGTGAATCTGAAACAATTTTACACCCTTAAGTGGTTGATACGTACCTA
TTTTAGGTATTTTGAGGTATTTACCATAAACTAAATTTAGAAATTTTTTAGATTCACTTGAAGTAAACATTACAA
ACATTGGATACGGTGGGGTTTTCTTTAGATTTTACTTGAGAGAAGGTGAGTACAAAGCAATTTGCAGTTGTTGTA
ATGACAAGATTACTGCGCAAGTGTGAATCCAAACAGTATAGCTTTTAAATTTTAAAGCATTGTTGTAATTTATCGC
TGAGTTTTTTTTCTGTTGCCAATAGCAAACCTGCTTTTCCATTAATGGAGAATTCATGCCTTTCAAGCATTTTAAAT
ATGACAATATTTATAAATGTATGGTTTGGAGGAATCGTTTAAATTTCTTTTCCTAATTTTCTTTCTTTTGAAGAT
AGATTCTTTCAACAAGTAATTTGTAGTAATGACTGTGTTGACTTCAATTTTGGAGCGCAGTAGCTATGTTAAAGA
TGAATATTTGGTCTCATTGAAGCCAACACAGAAGTCTGCTGTGTTTTTTCTTCAGTGATAAATAAATACTT
ACAG

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FIGURE 3083

MPAYFQRPENALKRANEFLEVGGKQPALDVLYDVMKSKKHRTWQKIHEPIMLKYLELCVDLRKSHLAKEGLYQYK
NICQQVNIKSLEDVVRAYLKMAEEKTEAAKEESQQMVLDIEDLDNIQTPEVLLSAVSGEDTQDRDRLLLTPWV
KFLWESYRQCLDLLRNNRVERLYHDIAQQAFKFCLQYTRKAEFRKLCNLRMHLSQIQRHNNQSTAINLNNPES
QSMHLETRLVQLDSAISMELWQEAFAVEDIHGLFSLSKKPPKQQLMANYYNKVSTVFWKSGNALFHASTLHRLY
HLSREMRKNLTQDEMQRMRSTRVLLATLSIPITPERTDIARLLDMDGIIIVEKQRRLATLLGLQAPPTRIGLINDMV
RFNVLQYVVPEVKDLYNWLEVEFNPLKLCERVTKVLNWVREQPEKEPELQQYVPQLQNNITLRLQQVVSQIYQSI
EFSRLTSLVPFVDAFQLERAIVDAARHCDLQVRIDHTSRTLSFGSDLYATREDAPIGPHLQSMPSQIRNQLTA
MSSVLAKALEVIKPAHILQEKKEQHQLAVTAYLKNRKEHQIRLARQTIEERKERLESNIQREKEELEQREAE
LQKVRKAEERLRQEAKEKEKERILQEHQIKKKTVRERLEQIKKTELGAFAKFDIDIEDLEELDPDFIMAKQVE
QLEKEKKELQERLKNQEKKIDYFERAKRLEEIPLIKSAYEEQRIKMDLWEQQEEERITTMQLEREKALEHKNRM
SRMLEDRDLFVMRLKAARQSVYEEKLKQFEERLAEERHNRLEERKRQRKEERRITYREKEEEEQRAAEQMLKE
REERERAERAKREEELREYQERVKKLEEVERKKRQRELEIEERERRREEERLGDSSLSRKDSRWGDRDSEGTWR
KGPEADSEWRRGPPEKEWRRGEGRDEDRSHRRDEERPRRLGDDEDREPSLRPDDDRVPRRGMDDDRGPARGPEED
RFSRRGADDDRP SWRNTDDDRPPRIADEDRGNWRHADDDRP PRGLDEDRGSWRTADEDRGPRRGMDDDRGP RR
GGADDERSSWRNADDDRGPRRLDDDRGPRRGMDDDRGPARGMDDDRGPARGMDDDRGPARGMDDDRGPWRNADD
DRIPRGAEDDRGPWRNMDDDRLSRRADDDRFPRRGDDSRPGPWRPLVKPGGWREKEKAREESWGPRESRPSSE
REWDRERDRDNQDREENDKDFERERDRERDVEDREDFRPRRDEGGWRRGPAEESSSWRDSSRRDDDRDRDRR
ERDDRRDLRERRDLRDDRRGPPLSEREVSSWRRADDRKDDRVEERDPPRRVPPALSRDRERDREREGERE
KEKASWRAEKDRESLRRTKNETDEDGWTTVRR

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FIGURE 3084

CTCCACGCGCGGCTGGCGGGCGGCGGCCACTCTAACCAGCGCAAAATGTCCTTGGAAACAGGAGGAGGAAACGCAA
CCTGGGCGGCTCCTAGGACGCAGAGACGCCGTCCCCGCCCTTCATTGAGCCCAACGTGCGCTTCTGGATCACCGAG
CGCCAATCCTTTATTTCGACGATTTCTTCAATGGACAGAATTATTAGATCCTACAAATGTGTTTCATTTTCAGTTGAA
AGTATAGAAAACTCGAGGCAACTATTGTGCACAAATGAAGATGTTTCCAGCCCTGCCTCGGCGGACCAAAGGATA
CAAGAAGCTTGGAAGCGGAGTCTTGCAACAGTGCATCCCGACAGCAGCAACCTGATCCCCAAGCTTTTTTCGACCT
GCAGCGTTCCCTGCCTTTTCATGGCACCCACGGTATTTTTGTCAATGACGCCACTGAAAGGGATCAAGTCCGTGATT
TTACCTCAGGTTTTCTCTGTGCCTACATGGCAGCGTTCAACAGCATCAATGGAAACAGAAGTTACACTTGTAAG
CCACTAGAAAGATCATTACTAATGGCGGGAGCCGTTGCTTCTTCAACTTTCTTAGGAGTAATCCCTCAGTTTGTC
CAGATGAAGTATGGCCTGACTGGCCCTTGGATTAAAAGACTCTTACCTGTGATCTTCCTCGTGCAAGCCAGTGGA
ATGAATGTCTACATGTCCCGAAGTCTTGAATCCATTAAAGGGGATTGCGGTCATGGACAAGGAAGGCAATGTCTG
GGTCATTCCAGAATTGCTGGGACAAAGGCTGTTAGAGAAACGCTAGCATCCAGAATAGTGCTGTTTGGGACCTCA
GCTCTGATTCTGAAGTCTTCACCTACTTTTTTAAAAGGACCCAGTATTTTCAGGAAAAACCCAGGGTCATTGTGG
ATTTTGAACTGTCTTGTACTGTCTGGCAATGGGACTGATGGTGCCATTTCTTTTAGTATATTTCCACAGATT
GGACAGATACAGTACTGTAGTCTTGAAGAGAAAATTCAGTCTCCAACAGAAGAAACAGAAATCTTTTATCACAGA
GGGGTGTAGGCGTGAGTTTTAGGTGAATTTATGTGGTTCTGCTTGAAAACCTTCCCCTCTCCAGGTTTCGGTTTA
GAGAACTTTGCCACAGGTCTTCTGGGGTTTTTAAGGCTGGCTGGAGAAGACAGTGGGAGGGTGCCCCGTCTGACA
CCCCTGGGGTTGCTGAGGGAACGGTTGGAGTGGGGATCGGCCTGCGAAAGGATACTGTGAAATCACTAATTAAC
AATAAACCTGTCTCAAGTTGAGGATTTGAAGAAA

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FIGURE 3085

MSLEQEEETQPGRLLGRRDAVPAFIEPNVRFWITERQSFIRRFLOWTELLDPTNVFISVESIENSRLCTNEDV
SSPASADQRIQEAWKRSLATVHPDSSNLIPKLFRPAAFLPFMAPTVFLSMTPLKGIKSVILPQVFLCAYMAAFNS
INGNRSYTCKPLERSLLMAGAVASSTFLGVIPQFVQMKYGLTGPWIKRLLPVIFLVQASGMNVYMSRSLESIKGI
AVMDKEGNVLGHSRIAGTKAVRETLASRIVLFGTSALIPFVFTYFFKRTQYFRKNPGSLWILKLSCTVLAMGLMV
PFSFSIFPQIGQIQYCSLEEKIQSPTEETEIFYHRGV

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FIGURE 3086

CTGAAGATGCGGGCTGCTGTAGGACGGTTGCTCCGAGCGTCGGTTGCCCCGACATGTGAGTGCCATTCCCTTGGGGC
ATTTCTGCCACTGCAGCCCTCAGGCCTGCTGCATGTGGAAGAACGAGCTTGACAAATTTATTGTGTTCTGGTTCC
AGTCAAGCAAAATTATTACAGCACCAGTTCCCTCATGCCATGCACCTGCTGTCACCCAGCATGCACCCATTTTAAG
GGTACAGCCGTTGTCAATGGAGAGTTCAAAGACCTAAGCCTTGATGACTTTAAGGGGAAATATTGGTGCTTTTC
TTCTATCCTTTGGATTTACCTTTGTGTGTCCTACAGAAATTGTTGCTTTTAGTGACAAAGCTAACGAATTCAC
GACGTGAACGTGTGAAGTTGTGCGAGTCTCAGTGGATTCCCACTTTAGCCATCTTGCCTGGATAAAATACACCAAGA
AAGAATGGTGGTTTGGGCCACATGAACATCGCACTCTTGTGAGACTTAAGCAGATTTCCTCGAGACTACGGT
GTGCTGTTAGAAGGTTCTGGTCTTGCACTAAGAGGTCTCTTCATAATTGACCCCAATGGAGTCATCAAGCATTG
AGCGTCAACGATCTCCAGTGGGCCGAAGCGTGGAAGAAACCCTCCGCTTGGTGAAGGCGTTCCAGTATGTAGAA
ACACATGGAGAAGTCTGCCAGCGAACTGGACACCGGATTCTCCTACGATCAAGCCAAGTCCAGCTGCTTCCAAA
GAGTACTTTTCAGAAGGTAAATCAGTAGATCACCCATGTGTAICTGCACCTTCTCAACTGAGAGAAGAACCACAGT
TGAAACCTGCTTTTATCATTTCAGATGGTTATTTGTAGAAGGCAAGGAACCAATTATGCTTGTATTTCATAAGT
ATTACTCTAAATGTTTTGTTTTTGTAAATTCTGGCTAAGACCTTTTAAACATGGTTAGTTGCTAGTACAAGGAATC
CTTTATTGGTAACATCTTGGTGGCTGGCTAGCTAGTTTCTACAGAACATAATTGCTCTATAGAAGGCTATTCT
TAGATCATGTCTCAATGGAAACACTCTTCTTTCTTAGCCTTACTTGAATCTTGCCTATAATAAAGTAGAGCAACA
CACATTGAAAGCTTCTGATCAACGGTCCTGAAATTTTCATCTTGAATGTCTTTGTATTAACTGAATTTCTTTT
AAGCTAACAAAGATCATAATTTTCAATGATTAGCCGTGTAACCTCTGCAATGAATGTTTATGTGATTGAAGCAAA
TGTGAATCGTATTATTTTAAAAAGTGGCAGAGTGACTTAACTGATCATGCATGATCCCTCATCCCTGAAATTGAG
TTTATGTAGTCATTTTACTTATTTTATTCATTAGCTAACTTTGTCTATGTATATTTCTAGATATTGATTAGTGTA
ATCGATTATAAAGGATATTTATCAAATCCAGGGATTGCATTTTGAAATTATAATTATTTTCTTTGCTGAAGTATT
CATTGTAAAAACATACAAAATAAACATATTTTAAA

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FIGURE 3087

MAAAVGRLLRASVARHVS AIPWGISATAALRPAACGRTSLTNLLCSGSSQAKLFSTSSSCHAPAVTQHAPYFKGT
AVVNGEFKDLSLDDFKGKYLVLFFYP LDFTFVCPTEIVAFSDKANEFHDVNCEVVAVSVDSHFSLAWINTPRKN
GGLGHMNIALLSDLTKQISR DYGVLLGSGLALRGLFIIDPNGVIKHLVNDLPVGRSVEETLRLVKAFQYVETH
GEVCPANWTPDSPTIKPSPAASKEYFQKVNQ

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FIGURE 3088

CAGAGGGAGGAAGAAGCGGCGGGCGGGCGGGCGGGCGGGCTCCTCTTTGCAGAGGGGGAACTCTTGGGCT
GAGAGCAGGAATAATGCGGTAGGCAAGGCGGGCTGCTGGCTCCCCGGCTCCGGCAGCAGCGGCGGCAGCCCGAG
CAGCGGCAGCAGCAGCGGCAGCACCCAGGCGCTGACAGCCCCGCGGGCGGGCTCCGTTGCTGACCGCCGACTGT
CAATGGAGCTGGAAAACATCGTGGCCAACACGGTCTTGCTGAAAGCCAGGGAAGGGGGCGGAGGAAAGCGCAAAG
GGAAAAGCAAGAAGTGGAAGAAATCCTGAAGTTCCCTCACATTAGCCAGTGTGAAGACCTCCGAAGGACCATAG
ACAGAGATTACTGCAGTTTATGTGACAAGCAGCCAATCGGGAGGCTGCTTTTCCGGCAGTTTGTGAAACCAGGC
CTGGGCTGGAGTGTTACATTAGTTCTGGACTCCGTGGCAGAATATGAAGTTACTCCAGATGAAAACTGGGAG
AGAAAGGGAAGGAAATTATGACCAAGTACCTACCCCAAAGTCCCCTGTTTTCATAGCCCAAGTTGGCCAAGACC
TGGTCTCCCAGACGGAGGAGAAGCTCCTACAGAAGCCGTGCAAAGAACTCTTTTCTGCCTGTGCACAGTCTGTCC
ACGAGTACCTGAGGGGAGAACCATTCCACGAATATCTGGACAGCATGTTTTTTGACCGCTTTCTCCAGTGAAGT
GTTTGGAAAAGGCAACCGGTGACCAAAAACACTTTTCAGGCAGTATCGAGTGCTAGGAAAAGGGGGCTTCGGGGAGG
TCTGTGCCTGCCAGGTTTCGGGCCACGGGTAAAATGTATGCCTGCAAGCGCTTGAGAGAAGAAGAGGATCAAAAAGA
GGAAAGGGGAGTCCATGGCCCTCAATGAGAAGCAGATCCTCGAGAAGGTCAACAGTCAGTTTGTGGTCAACCTGG
CCTATGCCTACGAGACCAAGGATGCACTGTGCTTGGTCTGACCATCATGAATGGGGGTGACCTGAAGTTCCACA
TCTACAACATGGGCAACCTGGCTTCGAGGAGGAGCGGGCCTTGTTTTATGCGGCAGAGATCCTCTGCGGCTTAG
AAGACCTCCACCGTGAGAACACCGTCTACCGAGATCTGAAACCTGAAAACATCCTGTTAGATGATTATGGCCACA
TTAGGATCTCAGACCTGGGCTTGGCTGTGAAGATCCCCGAGGGAGACCTGATCCGCGGCCGGGTGGGCACTGTTG
GCTACATGGCTCCAGAGGTCTGAACAACCAGAGGTACGGCCTGAGCCCCGACTACTGGGGCCTTGGCTGCCTCA
TCTATGAGATGATCGAGGGCCAGTCGCCGTTCGCGGCCGCAAGGAGAAGGTGAAGCGGGAGGAGGTGGACCGCC
GGGTCTGGAGACGGAGGAGGTGACTCCCAAGTTCTCCGAGGAGGCCAAGTCCATCTGCAAGATGCTGCTCA
CGAAAGATGCGAAGCAGAGGCTGGGCTGCCAGGAGGAGGGGGCTGCAGAGGTCAAGAGACACCCCTTCTTCAGGA
ACATGAACCTCAAGCGCTTAGAAGCCGGGATGTTGGACCTCCCTTCGTTCCAGACCCCCGCGCTGTGTACTGTA
AGGACGTGCTGGACATCGAGCAGTTCTCCACTGTGAAGGGCGTCAATCTGGACCACACAGACGACGACTTCTACT
CCAAGTTCTCCACGGGCTCTGTGTCCATCCCATGGCAAAACGAGATGATAGAAACAGAATGCTTTAAGGAGCTGA
ACGTGTTTGGACCTAATGGTACCCTCCCGCCAGATCTGAACAGAAACCACCTCCGGAACCGCCCAAGAAAGGGC
TGCTCCAGAGACTCTTCAAGCGGCAGCATCAGAACAATTCCAAGAGTTTCGCCCAGCTCCAAGACAGTTTTAACC
ACCACATAAACTCAAACCATGTGAGCTCGAACTCCACCGGAAGCAGCTAGTTTCGGCTCTGGCCTCCAAGTCCAC
AGTGGAAACCAGCCCAGACCCTTCTCCTTAGAAGTGGAAGTAGTGGAGCCCCCTGCTCTGGTGGGGCTGCCAGGGGA
GACCCCGGGAGCCGGGGAAGGAGGCCGTCCATCCCGTCGACGTAGAACCTCGAGGTTTCTCAAAGAAATTTCCAC
TCAGGTCTGTTTTCCGAGGCGGCCCGGGCGGGGTGGATTGGATTGTCTTTGGTGAACATTGCAATAGAAATCC
AATTGGATACGACAACCTTGACGATTTTTAATAGCGTCATAACTAGAACTGAATTTTGTCTTTATGATTTTTAAA
GAAAAGTTTTGTAAATTTCTCTACTGTCTCAGTTTACATTTTGTATATTTGTATTTAAATGAAAGTGAGACTTTG
AGGGTGTATATTTTCTGTGCAGCCACTGTTAAGCCATGTGTTCCAAGGCATTTTAGCGGGGAGGGGGTTATCAA
AAAAAAAATGTGACTCAAGACTTCAGAGCCTCAAATGAGAAAATGTCTTTATTAAATGTAGAAAGTGATCCA
TACTTC

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FIGURE 3089

GCCTGATCGGTTTCCGGTCAGTGGTGTGGTACCGGGTACCCGGAGACGTGTATCGGACGGTGGGCCGAGCCATG

GCCGAGAGAAAACCTAACGGTGGCAGCGGGCGGCCTCCACTTCCTCATCGGGCACTAACTTACTTTTCTCCTCC
TCGGCCACGGAGTTTCACTTCAATGTGCCCTTCATCCAGTCACCCAGGCCTCCGCTTCTCCGGCCTCCCTGCTC
TTACCGGGAGAGGATTCCACAGATGTTGGTGAGGAGGACAGCTTCCTTGGTCAGACTTCTATTACACATCTGCC
CCACAGACATTTAGTTACTTCTCTCAGGTATCAAGCAGCAGTGATCCTTTTGGGAATATTGGACAGTCACCATTA
ACAACTGCAGCAACCTCAGTTGGACAATCAGGATTCCCCAAGCCCCTGACTGCTCTCCCTTTTACAACCTGGATCC
CAAGATGTCTCGAATGCATTTTACCATCCATTTTGAAGGCTCAACCTGGTGTCTCCACCTTCCTCACTGATGGGA
ATAAATTTCTTATCTGCCTTCTCAGCCAAGTAGTCTCCCTCCTTCATATTTTGGGAACCAACCCCAAGGAATTCCC
CAACCAGGATACAATCCATATCGCCATACCCCTGGCAGCAGCAGGGCTAATCCTTACATTGCACCACCCAGCTG
CAGCAGTGCCAAACACAGGCCCTCCTGCTCATCCTCCACCTTCTGGACCCCTGTTTCAGATGTACCAGATGCCT
CCAGGATCTTTGCCACCGGTTCTTCTTCACTGTCAGTCACCGGCACAGCAGCAGGTACCTGCCAGACCTGGGGCT
CCCTCTGTTCAAGTGCCATCTCCTTTTCTACTTCAAACCAATATGAGCCTGTTTCAGCCCCACTGGTTTTACTGC
AAGGAGGTAGAATACAAACAACTGTGGATGCCTTTTGTGTGTTTGGACTCTTTGAATCTTGAAGAAATCTATAAT
TCAGTTTCAGCCAGATCCGGAGAGCGTGTTTCTTGGCACGGATGGAGGGCGCTACGATGTTTACCTCTATGACCGA
ATAAGGAAGGCTGCCTACTGGGAAGAGGAGCCAGCCGAAGTGAGACGCTGTACTTGGTTTTACAAGGGGGACACA
GATAGTCGATTTATTCCTATACTGAGGAGTTTCACTGAAAAACTAGAGGCTGAATATAAAAAAGCTGTAAACCACT
AATCAGTGGCACCGAAGATTAGAGTTTCCAAGTGGAGAGACAATTGTTATGCACAATCCAAAGGTTATTGTTTCAG
TTCCAGCCCTCCTCAGTGCCAGATGAATGGGGCACCACGCAAGATGGACAGACAAGGCCAGGGTTGTAAAGCGT
GGAATTGATGATAACCTTGATGAAATTCCTGACGGGGAGATGCCTCAAGTTGACCATTTGGTGTGTTGTGGTGCAT
GGCATTGGACCTGTGTGTGACTTACGCTTTAGGAGCATTATTGAGTGTGTGGATGATTTTAGGGTGGTTTTCTCTC
AAATTGCTGCGGACACATTTCAAGAAATCTTTAGATGACGGGAAAGTAAGCAGAGTGGAGTTTCTTCCAGTTTCT
TGGCATAGTTCTTTGGGTGGGGACGCCACAGGTGTGGACAGGAATATTAAGAAAATCACTTTGCCAAGTATTGGT
CGATTTCTGTCATTTACCAATGAACTTTGCTAGATATTTTATTTTATAACAGCCCCACCTACTGTGACACAATT
GTGGAAAAAGTAGGAATGGAGATAAACCATCTGCATGCACTCTTTATGAGTCGGAACCCAGACTTCAAAGGAGGT
GTCTCTGTTGCTGGTCACAGTTTAGGTTCTTTAATATTGTTTGACATCCTGTCTAATCAAAAAGATTTGAATTTA
TCAAAGTGCCCTGGACCTCTTGCTGTTGCTAATGGAGTTGTGAAGCAGCTACATTTTCAGGAAAAGCAGATGCCT
GAAGAGCCAAAGCTGACTTTGGATGAGTCGTATGACCTTGTGTGTTGAAAATAAAGAAGTCTTAACCTTTGCAAGAA
ACTCTGGAAGCACTTAGCCTCTCTGAATATTTTAGCACTTTTGAAGGAAAAGATTGATATGGAGTCCCTGCTT
ATGTGTACAGTTGATGACCTGAAGGAAATGGGGATACCCCTTGGACCCAGAAAGAAGATAGCTAACCTTTGTAGAA
CATAAAGCAGCCAACTGAAAAAAGCAGCGTCAGAAAAGAAGGCAGTGGCGGCCACTTCTACAAAAGGACAAAGAG
CAAAGTGCCCAAGACTAAAGACATGGCTTCCCTCCCTCAGAATCCAATGAGCCAAAGAGGAACTTCCAGTT
GGTGCTTGGTGTCTTCTGTGTGTGTGAATTATGAATCTTTTGAAGTTGGCGCCGGACAGGTTTCTGTTGCTTAC
AACTCATTAGATTTTGAACCAGAGATATTCTTTGCCTTGGGGTCTCCAATTGCTATGTTTCTCACTATTTCAGGA
GTTGATAGGATAGATGAGAATTACAGCCTTCCCTACCTGTAAAGGGTCTTCAATATTTATCATCCGCTTGATCCA
GTGGCATATAGATTAGAACCCTATGATTGTTCCAGATTGGACCTAAAAGCTGTCTCATTCCACATCACAAAGGC
AGAAAAAGACTTCATTTAGAATTGAAAGAGAGTCTCTCTCGTATGGGATCTGATTTGAAGCAGGGTTTTATTAGC
TCTCTCAAAGTGCTTGGCAGACATTAATGAGTTTGCCCGTGCTCATACGCTTCAACCCAGTTGCAAGAAGAA
TTGGAGAAGGTGGCCAATCAGATCAAAGAAGAAGAAAAGCAAGTAGTTGAAGCAGAAAAGGTTGTTGAAAGT
CCAGATTTTCCAAGGATGAGGACTACTTAGGAAAGGTTGGAATGTTAAATGGAGGCCGCCGAATTGACTACGTT
CTCCAAGAAAAACCAATAGAGAGTTTTAATGAATACCTTTTCGCTCTTCAGAGTCACTTATGCTATTGGGAATCT
GAAGATACTGCTCTGTTACTACTTAAAGAAATTTATCGAACAATGAACATTAGTCCAGAACAGCCCCAGCATGGA
TCAAACCTTCAGTT

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FIGURE 3090

MAERKPNGGSGGASTSSSGTNLLFSSSATEFSFNVPFIPVTQASASPASLLLPGEDSTDVGEEDSFLGQTSIH
APQTFSYFSQVSSSSDPFGNIGQSPLTTAATSVGQSGFPKPLTALPFTTGSQDVSNAFSPSISKAQPGAPSSLM
GINSYLPSQPSSLPPSYFGNQPGQIPQPGYNPYRHTPGSSSRANPYIAPPQLQQCQTPGPPAHPPPSGPPVQMYQM
PPGSLPPVPSSVQSPAQQQVPARPGAPSVQVPSPFLLQNQYEPVQPHWFYCKEVEYKQLWMPFSVFDLSNLEEIY
NSVQPDPESSVVLGTDGGRYDVYLYDRIRKAAWEEPAEVRRCTWIFYKGDTSRFPYTEEFSEKLEAEYKKA
VTNQWHRRLEFPSETIVMHNPKVIVQFQPSVPDEWGTQDGGQTRPRVVKRGIDDLNDEIPDGEMPQVDHLV
FVHGIGPVCDLRFRSIIIECVDDFRVVSLLKLLRTHFKKSLDDGKVSVEFLPVHWHSSLGGDATGVDRNIKKITLPSI
GRFRHFTNETLLDILFYNSPTYCQTIVEKVGMEINHLHALFMSRNPDKGGVSVAGHSLGSLILFDILSNQKDLN
LSKCPGPLAVANGVVKQLHFQEKQMPEEPKLTLDSEYDLVVENKEVLTTLQETLEALSLEYFSTFEKEKIDMESL
LMCTVDDLKEMGIPLGPRKKIANFVEHKAALKKAASEKKAVAATSTKGQEQAQKTKDMASLPSESNEPKRKLP
VGACVSSVCVNYESFEVGAGQVSVAYNSLDFEPEIFFALGSPIAMFLTIRGVDRIDENYSLPTCKGFFNIYHPLD
PVAYRLEPMIVPDLDLKAFLIPHHKGRKRLHLELKESSLRMGSDLKQGFISLKSAAWQTLNEFARAHTSSTQLQE
ELEKVANQIKEEEEKQVVEAEKVVESPDFSKDEDYLGKVGMLNGGRRIDYVLQEKPIESFNEYLFALQSHLCYWE
SED TALLLLKEIYRTMNISPEQPQH

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FIGURE 3091

GAACCGCCATCTTCCAGTAATTCGCCAAAATGACGAACACAAAGGGAAAGAGGAGAGGCACCCGATATATGTTCT
CTAGGCCTTTTAGAAAACATGGAGTTGTTTCCTTTGGCCACATATATGCGAATCTATAAGAAAGGTGATATTGTAG
ACATCAAGGGAATGGGTACTGTTCAAAAAGGAATGCCCCACAAGTGTTACCATGGCAAACTGGAAGAGTCTACA
ATGTTACCCAGCATGCTGTTGGCATTGTTGTAAACAAACAAGTTAAGGGCAAGATTCTTGCCAAGAGAATTAATG
TGCGTATTGAGCACATTAAGCACTCTAAGAGCCGAGATAGCTTCCTGAAACGTGTGAAGGAAAATGATCAGAAAA
AGAAAGAAGCCAAAGAGAAAGGTACCTGGGTTCAACTAAAGCGCCAGCCTGCTCCACCCAGAGAAGCACACTTG
TGAGAACCAATGGGAAGGAGCCTGAGCTGCTGGAACCTATTCCTATGAATTCATGGCATATAGGTGTTAAAAA
AAAAAATAAAGGACCTCTGGGCTACAAAAAAAAAAAAAAAAAAAA

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FIGURE 3092

MTNTKGKRRGTRYMF SRPFRKHGVVPLATYMRIYKKGDIVDIKGMGTVQKGMPhKCYHGKTGRVYNVTQHAVGIV
VnkQVKGKILAKRINVRIEHIKHSKSRDSFLKRVKENDQKKKEAKEKGTWVQLKRQPAPPREAHFVRTNGKEPEL
LEPIPYEFMA

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FIGURE 3093

GAAGCAAGGAGGCGGCGGCGGCCGAGCGAGTGGCGAGTAGTGGAAACGTTGCTTCTGAGGGGAGCCCAAGATGAC
CGGTTCTAACGAGTTCAAGCTGAACCAGCCACCCGAGGATGGCATCTCCTCCGTGAAGTTCAGCCCCAACACCTC
CCAGTTCTCTGCTTGTCTCCTCCTGGGACACGTCCGTGCGTCTCTACGATGTGCCGGCCAACTCCATGCGGCTCAA
GTACCAGCACACCGGCGCCGTCCTGGACTGCGCCTTCTACGATCCAACGCATGCCTGGAGTGGAGGACTAGATCA
TCAATTGAAAATGCATGATTTGAACACTGATCAAGAAAATCTTGTGGGACCCATGATGCCCTTATCAGATGTGT
TGAATACTGTCCAGAAGTGAATGTGATGGTCACTGGAAGTTGGGATCAGACAGTTAACTGTGGGATCCCAGAAC
TCCTTGTAATGCTGGGACCTTCTCTCAGCCTGAAAAGGTATATACCCTCTCAGTGTCTGGAGACCGGCTGATTGT
GGGAACAGCAGGCGCGAGAGTGTGGTGTGGGACTTACGGAACATGGGTTACGTGCAGCAGCGCAGGGAGTCCAG
CCTGAAATACCAGACTCGCTGCATACGAGCGTTTCCAAACAAGCAGGGTTATGTATTAAGCTCTATTGAAGGCCG
AGTGGCAGTTGAGTATTTGGACCCAAGCCCTGAGGTACAGAAGAAGAAGTATGCCTTCAAATGTCACAGACTAAA
AGAAAAATAATATTGAGCAGATTTACCCAGTCAATGCCATTTCTTTTACAATATCCACAATACATTTGCCACAGG
TGGTCTGATGGCTTTGTAAATATTTGGGATCCATTTAACAAAAAGCGACTGTGCCAATTCCATCGGTACCCAC
GAGCATCGCATCACTTGCCCTCAGTAATGATGGGACTACGCTTGCAATAGCGTCATCATATATGTATGAAATGGA
TGACACAGAACATCCTGAAGATGGTATCTTCATTGCGCAAGTGACAGATGCAGAAACAAAACCCAAAGTCACCATG
TACTTGAACAAGATTTCACTTAACTTAAGTGCCATGTTGATGATAATAAAACAATTCTGACTCCCCAATGGTGGATT
TATTACTATTAAAGAAACCAGGGAAAATATTAATTTTAATATTATAACAACCTGAAAATAATGGAAAAGAGGTTT
TTGAATTTTTTTTTTTAAATAAACACCTTCTTAAGTGCATGAGATGGTTTGTGTTTGTGCTGCATTAAAGGTATT
TGGGCAACAAAATTGGAGGGCAAGTGACTGCAGTTTTGAGAATCAGTTTTGACCTTGATGATTTTTTGTTCCTCA
CTGTGGAAATAAATGTTGTAAATAAGTGAATAAAAAATCCCTTTGCATTCTTTCTGGACCTTAAATGGTAGAGG
AAAAGGCTCGTGAGCCATTTGTTTCTTTTGCTGGTTATAGTTGCTAATTCTAAAGCTGCTTCAGACTGCTTCATG
AGGAGGTTAATCTACAATTAAACAATATTTCTCTTGCCGTCCATTATTTTCTGAAGCAGATGGTTCATCATTT
CCTGGGCTGTTAAACAAAGCGAGGTTAAGGTAGACTCTTGGAATCAGCTAGTTTTCAATCTTATTAGGGTGCA
GAAGGAAACTAATAAGAAAACCTCCTAATATCATTTTGTGACTGTAAACAATTATTTATTAGCAACAATTGAT
CCCAGAAGGGCAAATTGTTTGAGTCAGTAATGAGCTGAGAAAAGACAGAGCATATCTGTGTATTTGGAAAAATA
TTGTAACGTAATTGCAGTGCATTTAGACAGGCATCTATTTGGACCTGTTTCTATCTCTAAATGAATTTTTTGAAA
CATTAAATGAGGTTTACATATTTCTCTGACATTTATATAGTTCTTATGTCCATTTAGTTGACAGCCGCTGGTGA
TTAAAGTTAAAAAGAAAAAATTATAGTGAGAATGAGATTCATTTCAATGTAATGCACTAAAGCAGAACACGAAC
TTAGCTTGGCCTATTCTAGGTAGTTCCAAATAGTATTTTGTGTGCAAACTTTAAATTTATATTAATTTGCAAA
TGTATGTCTCTGAGTAGGACTTGGACCTTCTCTGAGATTTATTTTATCCGTGATGATTTTTTTTAATTCCTTTG
ATACAGAGAAGGGTCTTTTTTTTTTTTAAGTATTTCAAGTGAAGTCTGAACCCATCTTTTGAAAT
GTATTTTCTTCATTGCAGGTCCACCTAATCATCTGTGAAAGTGGTTTCTCTATGGAAAGCTTTGTTTGTCTCCT
ACAAATACATGCTTATTCCTTAAGGGATGTGTTAGAGTTACTGTGGATTTCTCTGTTTCTGTCTTACAAGAAAC
TTGTCTATGTACCTTAATACTTTGTTTAGGATGAGGAGTCTTTGTGTCCCTGTACAGTAGTCTGACGTATTTCCC
CTTCTGTCCCTAGTAAGCCAGTTGCTGTATCTGAACAGTTTGAGCTCTTTTGTAAATATACTCTAAACCTGTT
ATTTCTGTGCTAATAAACGAGATGCAGAACCTTGAAAAA

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FIGURE 3094

MTGSNEFKLNQPPEDGISSVKFSPNTSQFLLVSSWDTSVRLYDVPANSMRLKYQHTGAVLDCAFYDPTHAWSGGL
DHQLKMHDNLNTDQENLVGTHDAPIRCVEYCPEVNVMTGSWDQTVKLWDPRTPCNAGTFSQPEKVYTLSVSGDRL
IVGTAGRRVLVWDLRNMGYVQQRRESSLKYQTRCIRAFPNKQGYVLSSIEGRVAVEYLDPSPEVQKKKYAFKCHR
LKENNIEQIYPVNAISFHNIHNTFATGGSDGFVNIWDPFNKKRLCQFHRYPTSIASLAFSNDGTTLAIASSYME
MDDTEHPEDGIFIRQVTDATKPKSPCT

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FIGURE 3095

ATTTTCCACGCTGTACCGGCGGAAATTCAAGCACTGGAAGAGAGGTTCCGGGGCTGGGCTGGCCTGACTGAAGGC
GGCGGAATGGAGACGCGGACCGAGGACGGGGGCCTCACCCGCCGCCCCACGCTGGCCTCTTCTTGGGATGTTGCA
GGCGGGGCCCTGACCCACAGCCTCCTCCTCACCCGGGCGGTCTCGGCCCCGGTGACTTCGACTGGGAGGAGCTG
CTGGCACCGCCTGCTCCAGGTGAGGATCTGGTGATTTTGAAGAGAAACCACAACGACAAAGATGAAAACCCCTGC
TTCCTTTACCTGAGGTGTGGCCCTGATGGAGGTGAAGAAATCGCTTCTATTGGCATTTTAAGTTCAGCAAGAAAT
ATGGAAGTGTAAGGAGAGGAGTACTGTGGAACAGTAGGGGCAAGAATGTTTGTACTGTCCTGGATGACAGT
GAACATGAAAAGATCATTTTGTATAAAAAAATCTAAATTTGGAGTCCTCCACACATGCTTGTAAAATAAAGTTG
CTCTCCTTTGGCGAAAGGCAGTGTGTGTTTCATCAGTAAAGTTGTGGTACACATGAGATCAGTTTTTGCAAATCT
TCAACAAGCTCTCCTGCTCTAGGATCAAGGATAGACCTTGACAAGGTCCAAACCATAATGGAGTCCATGGGGTCA
AAGTTATCTCCTGGAGCTCAGCAGTTGATGGATATGGTTAGGTGTCAGCAGCGGAATTGTATTCCCATTTGGAGAG
CAGCTTCAGTCGGTGTGGGCAATTCTGGATACAAGCATATGATTGGACTACAATCCTCATCTACCTTAGGAACC
TTAAACAAGTCGCTCTCCACACCTTTTCTTTTGAAGTGGATTGACATCTGGGAACGTGACTGAAAACCTTACAA
ACTTACATTGATAAAAGTACACAACCTGCCTGGTGGAGAGAATTCTACCAAGCTTGATGAGTGTAAAGTTATGCCT
CAAAACCATTCCTTTCTTGAAGATGATCTTAAAAATGCAATGGCCTCTTTCTTACCAAAGAAAGTAAGTGACAAC
TCAAAATATACCAACTCCGAGTTGCTGCCTTTTCTCCAGAATTTATGTAGTCAAGTTAATCATCTCCATGTGGGA
AATAAGACCGAGTGTCAGGAAAACATCACCAAGCATGGTGAACGCATTCTTGGTGTGGAATGGAAGAGCAATCT
ATTTGCTCCTACTTGGAAAAGATTCTTTCTAAAAATATGGAAGTATGGAAGAAAGAACTTATGGATTACATTGAT
CAGCGAATACATGAACTCCAGGAGCACATTGATGATAAGATTGCTTTGTTACTGGATTGTCTGCAAAATCCTAAC
TCCCCGCCCACTGGGATACCTCTAAGACATTATGACTCTGGAGAAAGACTTTCAAATGGAGAAAGATAAGCTCTC
AACATAAACAGTGTACTGCAGATATTTATTACATATTTATTACAAAGCCAAAACCCAAAAATATTTATAAAAGC
AAGTATTTAATGTCTTTGAGGGATCATTGTCTTACACAAAGTGACCTCAGTTTTTCGTTTTTACTACACTTGTTA
TTTTAAATCCAGTACTGTACACTGAGTTAATATGATACAGTCAAATTATTTTTGCTCACGATATTTTTCAGTCTT
ACAGAAATGTATGTATATTTGTGTTAAGAGTTTAAATGCTTGAGGATTTCTAATACAGTTCATTAGTTTGTATT
GTATATGTGTTAAGTATAATTTTATTTATACAAAGATCTTATAGTCTTAGAAGTATGAAAAATAATGCTTAAG
AGTATTTGATTTTTTCTTTTTCTAATTATCTTGGAAAATTGGATACTTAAGACTTGGAGCCTTTACTTCAGATT
ACCAGTTTACATTTTGTATTGCTTGTGTGAGATAATGAATAAGATGTGATATTTGGCATGTGTAACTTAGTTCA
CTCTGGGGTTGTTAATATATTTTGTTCATTACAGAGTAGCTGTAGGTAGGAAAGTAAACATCAGAACTAGCCTA
GTCCTTGTACGATTAGTACTTTGGATTTGATTTTTCTGTAAAACAGATGCAGTCATCTTGTGTGACCTCAGTA
ACCCAGACAGTTTAAAGAAAACCTCTCCTTTTGGAGCTGATACAGGTTTTTTTCCCAGAAATCCTTTTCTGGCATGT
TTATTGTATGAAATAATGAGGCTCTCCATGGAAGGATGAACACATATGAGTCAAGGGATTGCAATTCTCTCTGAT
AGACTTAGTTTTTCAGACCTTATAACTATTGTATATGCATTGAAGGGTGATATATTTGCATATAAAAAATAAACGCA
CCTGCTCTGGG

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FIGURE 3096

METRTEGGGLTRRPTLASSWDVAGGALTHSLLLTRAGLGPGDFDWEELLAPPAPGQDLVILKRNHNDKDENPCFL
YLRCGPDGGEEIASIGILSSARNMEVYLGEYCGTSRGKNVCTVLDSEHEKIILYKKNLKLESSTHACKIKLLS
FGERQCVFISKVVVHMRSVFANSSTSSPALGSRIDLDKVQTIMESMGSKLSPGAQQLMDMVRCQQRNCIPIGEQL
QSVLGNSGYKHMIGLQSSSTLGTLNKSSSTPFFPRTGLTSGNVTENLQTYIDKSTQLPGGENSTKLDECKVMPQN
HSFLENDLKNAMASFLPKKVSDNSNIPNSELLPFLQNLCSQVNHHLVGNKTECQENITKHGERILGVGMEEQSIC
SYLEKILSKNMELMEKKLMDYIDQRIHELQEHIDDKIALLLDLLQNPNSPPTGIPLRHYDSGERLSNGER

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FIGURE 3097

GTGAGCGGCAACATGGCGTCCAGGTCTAAGCGGCGTGCCGTGGAAAGTGGGGTTCCGCAGCCGCCGGATCCCCCA
GTCCAGCGCGACGAGGAAGAGGAAAAAGAAGTCGAAAATGAGGATGAAGACGATGATGACAGTGACAAGGAAAAG
GATGAAGAGGACGAGGTCATTGACGAGGAAGTGAATATTGAATTTGAAGCTTATTCCTATCAGATAATGATTAT
GACGGAATTAAGAAATTACTGCAGCAGCTTTTTCTAAAGGCTCCTGTGAACACTGCAGAACTAACAGATCTCTTA
ATTCAACAGAACCATATTGGGAGTGTGATTAAGCAAACGGATGTTTCAGAAGACAGCAATGATGATATGGATGAA
GATGAGGTTTTTGGTTTCATAAGCCTTTTAAATTTAACTGAAAGAAAGGGTACCCAGTGTGTTGAACAAATTCAA
GAGTTGGTTCTACGCTTCTGTGAGAAGAACTGTGAAAAGAGCATGGTTGAACAGCTGGACAAGTTTTTAAATGAC
ACCACCAAGCCTGTGGGCCTTCTCCTAAGTGAAAGATTCATTAATGTCCCTCCACAGATCGCTCTGCCCATGTAC
CAGCAGCTTCAGAAAGAACTGGCGGGGGCACACAGAACCAATAAGCCATGTGGGAAGTGCTACTTTTACCTTCTG
ATTAGTAAGACATTTGTGGAAGCAGGAAAAACAATTCCAAAAAGAAACCTAGCAACAAAAAGAAAGCTGCGTTA
ATGTTTGCAAATGCAGAGGAAGAATTTTCTATGAGGAGCAGGGAAAACCTGAGGTGCTTGGAGGTCCAGACACA
AGAAGAGGATTGGAACCAAGTTCGATACAGCACAAATGGTGGTTCACGGGGGCAAGTGACAGCCCTGGTTTCTCTG
AAGGCTGGACTAATTCAATCAAGATCAACTCTAAGTGATTTCCAGGGAACCTTCATGACTGTTGGAATTGCTCTG
TCATAATAAGTCAGGGATATTTAGGAGGCTCATAGTCTCCTGGAGGGATAAAACATCTCGGCACCTAGTAATGGT
AAATTAGTCAATATTTGTTAGTTTCGTTTGAGATCTCAAATGTTAGGATTTTCTGAAGTCTCAGTGTCTTTCAGA
GTTTGAGATACCTTGTTTTTCATTTTTCTAATTTTTAATTTAAAGTAATAAAGAATATTTTGTAAATGATTAGGA
TGAAAATTTTATCGTCAATTATAAGCCAAAATTTGCTAAAATTAAAGTCAGTATACTTGGAACCAAAAAAAAAA
AAAAAAAAAAAAAAAA

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FIGURE 3098

MASRSKRRAVESGVPQPPDPPVQRDEEEEKEVENEDDDDDSDKEKDEEDEVIDEEVNIEFEAYSLSNDYDGIK
KLLQQLFLKAPVNTAELTDLLIQQNHIGSVIKQTDVSEDSNDDMDEDEVFGFISLLNLTERKGTQCVEQIQELVL
RFCEKNCEKSMVEQLDKFLNDTTKPVGLLLSERFINVPPQIALPMYQQLQKELAGAHRTNKPCGKCYFYLLISK
FVEAGKNNSSKKKPSNKKKAALMFANAEFFYEEQGKPEVLGGPDTRRGLEPVP IQHNGGSRGQVTALVSLKAGL
IQSRSTLSDFQGTFTVGIALS

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FIGURE 3099

GCGGAGCGAGCCCTGAAAGGCTATAGGCGAGGGGGCGGCTCCGCGGGGCCGGGCGAGGAGTCCAGAGAGCCATGG
CCGCCCTGCGTGTCTGTCTGTCTGCGCCCGCGGGCCCGCTGAGGCCCGCGGTTTCGCTGTCCCGCTGGCGTCCCT
TCGCCTCGGGTGCTAACTTTGAGTACATCATCGCAGAAAAAGAGGGAAGAATAACACCGTGCGGTTGATCCAAC
TGAACCGCCCCAAGGCCCTCAATGCACCTTTGCGATGGCCTGATTGACGAGCTCAACCAGGCCCTGAAGATCTTCG
AGGAGGACCCGGCCGTGGGGGCCATTGTCTCACCGGCGGGGATAAGGCCTTTGCAGCTGGAGCTGATATCAAGG
AAATGCAGAACCTGAGTTTCCAGGACTGTACTCCAGCAAGTTCTTGAAGCACTGGGACCACCTCACCCAGGTCA
AGAAGCCAGTCATCGCTGCTGTCAATGGCTATGCCTTTGGCGGGGGCTGTGAGCTTGCCATGATGTGTGATATCA
TCTATGCCGGTGAGAAGGCCAGTTTGCACAGCCGAGATCTTAATAGGAACCATCCCAGGTGCGGGCGGCACCC
AGAGACTCACCCGTGCTGTTGGGAAGTCGCTGGCGATGGAGATGGTCCTCACCGGTGACCGGATCTCAGCCAGG
ACGCCAAGCAAGCAGGTCTTGTGAGCAAGATTTGTCTGTTGAGACACTGGTGAAGAAGCCATCCAGTGTGCAG
AAAAAATTGCCAGCAATTCATAAATTGTAGTAGCGATGGCCAAAGAATCAGTGAATGCAGCTTTTGAAATGACAT
TAACAGAAGGAAGTAAGTTGGAGAAGAACTCTTTTATTCAACCTTTGCCACTGATGACCGGAAAGAAGGGATGA
CCGCGTTTGTGGAAAAGAGAAAGGCCAACTTCAAAGACCAGTGAGAACCAGCTGCCCCCTGCTTCACACCTCTGCT
TGGAGAGGACAAGTGCAGCCTGTCAGTTTTAGAAAGCAAGTAAATCATCCTCTTTTCAAGAGCAGTGTCCGTGGTG
TGCAGTTCCTCTCCAATTGCTGCGTGGTCTGCGCCGACCTCTCACGGCATGACAGCCTTCGTACCCAGCCTGT
GAGGGTCCCTGACTGGAGCACCTTCTAAATCTAAGATTCTGCTGAGGAGCCCCGCTGGTCCCTCTGGGCATGCTG
TGCTCGGACGGAAGCGGGGCCCTGCGGGTCCTTGTGTCCCTGCCGCTGAAGAATGGGGCTGCTCTGAGGGAAACG
CTGTCTGCTGCCTTCATACAGATGCTGATTAAAGTGATAGCGATTGAGATT

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FIGURE 3100

MAALRVLLSCARGPLRPPVRCPAWRPFASGANFEYIIAEKRGKNNTVGLIQLNRPKALNALCDGLIDELNQALKI
FEEDPAVGAIIVLTGGDKAFAAGADIKEMQNLSFQDCYSSKFLKHWDHLTQVKKPVIAAVNGYAFGGGCELAMMCD
IIYAGEKAQFAQPEILIGTIPGAGGTQRLTRAVGKSLAMEMVLTGDRISAQDAKQAGLVSKICPVETLVEEAIQC
AEKIASNSKIVVAMAKESVNAAFEMTLTEGSKLEKKLFYSTFATDDRKEGMTAFVEKRKANFKDQ

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FIGURE 3101

GGCGGAAGTGGCTCCGGGACTGCGGAGAACATATTGTGATGTTTCGTGCCTCAGAGCTAAACTATGAGTGAATTT
CGGATTACCATGACGTCAATGAACTGCTTAGCCTGCTGCGTGTCCACGGAGGAGATGGGGCTGAGGTCTACATT
GACCTGCTTCAAAAAGAACAGGAACCCGTACGTCACTACCCTGTCTCTGCTCACAGTGCCAAGGTTAAAAATTGCA
GAGTTTTCTCGTACTCCAGAAGACTTTCTAAAGAAATATGATGAACTGAAATCTAAAAATACAAGGAACCTTGAC
CCGCTGGTGTACCTGTTGTCAAAGCTCACGGAAGACAAAGAGACTCTGCAGTACTTACAACAGAATGCAAAAAGAA
AGAGCTGAGCTTGACGCCGTGCTGTGGGACAGCAGTACCACCAGCATCAACGTCCCTGCCGCGGCCTCCAAGATC
TCCATGCAGGAGCTTGAGGAAGTGAAGGAGCAGCTTGGCAGCGTGGCCACAGGCTCCACGCTGCAGCAGTCTCTG
GAACTTAAAGAAAGATGCTTCGAGACAAGCAGAACAAAAAATTCAGGCCAGCACCTCCCCATCTTCCCAGCA
TGGGTGTATGAGAGACCTGCCCTGATCGGGGATTTCTTGATTGGTGTGGCATCAGCACAGACACCGCTTTGCCG
ATAGGCACGTTGCCCTGCCCTCGCAGGAGTCGGCCGTGGTGGAGGACCTGCTGTACGTGCTGGTGGGCGTGGAC
GGGAGGTACGTCACTGCTCAGCCCCCTGGCTGGGAGGCAGAGCCGGACCTTCCTCGTGGACCCCAACCTGGACCTG
TCCATCAGGGAGCTGGTGCACAGGATCCTCCCAGTGGCCGCCAGCTACTCCGCTGTGACCAGGTTTATTGAAGAG
AAGTCTTCTTTCAGTACGGGACAGGTGAACCACGCCCTGGCGGCCGCCATGCGCACCTGGTGAAGGAGCACCTG
ATTCTGGTGTACAGCTGGAGCAGCTGCACAGGCAGGGCTCCTTTCGCTGCAGAAGCTCTGGTTCTACATCCAG
CCAGCCATGCGCACCATGGACATCCTGGCCTCCCTCGCCACCTCGGTGGACAAAGGCGAATGTCTTGGGGGGTCC
ACGCTGAGCCTGCTCCACGACAGGAGCTTACGTACACAGGGGACAGCCAGGCGCAGGAGCTATGCCTGTACCTA
ACCAAGGCGGCCAGTGCTCCCTACTTCGAGGTTCTGGAGAAGTGGATCTACAGGGGCATCATCCACGACCCATAC
AGTGAGTTTATGGTCGAGGAGCAGCAGCTGCGGAAGGAGAGGATCCAGGAGGATTACAACGACAAGTACTGGGAC
CAGCGGTACACCATCGTCCAGCAGCAGATCCCGTCTTCTGCGAGAAAATGGCGGACAAGATCCTCAGCACAGGA
AAATATCTAAATGTGGTCAGAGAGTGTGGCCATGACGTACCTGCCCGTGGCTAAAGAGATCATCTACACGTTA
AAAGAGCGGGCGTATGTGGAGCAGATCGAGAAGGCGTTTAACTACGCCAGCAAGGTGCTGCTGGACTTCTGATG
GAGGAGAAGGAGCTGGTGGCTCACCTCAGGTCCATCAAGCGCTACTTCTCATGACCAGGGCGACTTCTTCGTG
CACTTCATGGACCTCGCGGAGGAGGAGCTCCGGAAGCCGGTGGAGGACATCAGCCCCCTCGCCTGGAAGCGCTC
CTGGAGCTGGCGCTGCGCATGAGCACGGCCAACACTGACCCCTTCAAGGACGACCTCAAGATCGACCTGATGCC
CATGACCTCATCACTCAGCTCTTGCGCGTCTTGCCATCGAGACCAAGCAGGAGAAGGCGATGGCGCACGCCGAC
CCCACGGAGCTGGCGCTGAGCGGCCCTGGAGGCCCTTCTTTCGACTACATCGTCAAGTGCCCCCTTTCGCTCATC
ATCAACAGGAAAGCCCTCACTCGCTACCAGATGCTCTTCAGGCACATGTTCTATTGCAAGCACGTGGAGCGGCAG
CTCTGCAGCGTCTGGATCAGCAACAAAACCGCCAAGCAGCACTCGCTGCACTCCGCCAGTGGTTTGCTGGGGCT
TTCACCTGCGGGCAGCGAATGCTCAACTTCGTCCAGAATATTCAATACTACATGATGTTTGAAGTGATGGAACCG
ACCTGGCACATCCTGGAGAAAAACCTGAAATCCGCCTCCAACATTGACGACGTCTTGGCCACCACACAGGCTTC
CTGGACACCTGCCTGAAGGACTGCATGCTCACCACCCCCGAGCTGCTGAAGGTCTTCTCCAAGCTCATGTCTGTG
TGCGTCATGTTTACCAACTGCATGCAGAAATTTACACAGAGCATGAAATTAGATGGCGAGCTGGGCGGGCAGACG
CTGGAGCACAGCACCGTCTTGGGGCTGCCCGCAGGGGCCGAGGAGCGGGCCGGAAGGAGCTCGCCAGGAAGCAC
CTGGCTGAGCACGCAGACACTGTGCAGCTGGTGTCCGGCTTCGAGGCCACCATCAACAAGTTTGACAAGAACTTC
TCAGCCCACCTGCTGGACCTCCTGGCCCCGGCTGAGCATCTATAGCACCAAGTGACTGTGAGCACGGCATGGCCAGC
GTCATCTCCAGGCTTGACTTCAATGGTTTCTACACGGAGCGCCTGGAGCGCCTGTCTGCAGAGAGGAGCCAGAAG
GCCACCCCCCAAGTGCTGCTGCTGCGGGGGCCCCCGGCTCCTGCACCCAGGGTCGCAGTCACCGCACAGTGAGCC
CTGGCTGTGACAGGAAGGAAGGGTGTGGGGTCAGCAGGGACTGGTGCAAATGGGTCCAGAATTTTCAAATC

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FIGURE 3102

MSEFRIHHDVNELLSSLRVHGGDGAEVYIDLLQKNRTPYVTTTSAHSAKVIAEF SRTPEDFLKKYDELKSKNT
RNLDPLVYLLSKLTEDKETLQYLQONAKERAELAAAVGSSTTSINVPAAASKISMQELEELRKQLGSGVATGSTL
QQSLELKRKMLRDKQNKNSGQHLP IFFPAWVYERPALIGDFLIGAGISTDTALPIGTLPLASQESAVVEDLLYVL
VGVDGRYVSAQPLAGRQSRFTLVDPNLDLSIRELVHRILPVAASYSAVTRFIEEKSSFYEGQVNHALAAAMRTL
KEHLILVSQLEQLHRQGLLSLQKLWFIQFAMRTMDILASLATSVDKGECLGGSTLSLLHDRSFSYTGDSQAQEL
CLYLTKAASAPYFEVLEKWIYRGIHDPYSEFMVEEHELKERIQEDYNDKYWDQRYTIVQQQIP SFLQKMADKI
LSTGKYINVVRECGHDVTCVAKI IYTLKERAYVEQIEKAFNYASKVLLDFLMEEKELVAHLRS IKRYFLMDQG
DFFVHFMDLAEEELRKPVEDITPPRLEALLELALRMSTANTDPFKDDLKIDLMPHDLITQLLRVLA IETKQEKAM
AHADPTLALSGLEAFSFDYIVKWPLSLIINRKALTRYQMLFRHMFYCKHVERQLCSVWISNKTAKQHSLHSAQW
FAGAFTLRQRMNFVQNIQYYMMFEVMEPTWHILEKNLKSASNIDDLGHHTGFLDTCLKDCMLTNPELLKVFSK
LMSVCVMFTNCMQKFTQSMKLDGELGGQTLHSTVLGLPAGAEERARKELARKHLAEHADTVQLVSGFEATINKF
DKNFSAHLDDLARLSIYSTDCEHGMA SVISRLDFNGFYTERLERLSAERSQKATPQVPVLRGPPAPAPRVAVT
AQ

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FIGURE 3103

GACCCGGCCATGCGCGGCTCTGGGCTCTGGCTGCTGGGCGCGATGATGCTGCCTGCGATTGCCCCAGCCGGCCC
TGGGCCCTCATGGAGCAGTATGAGGTCGTGTTGCCGTGGCGTCTGCCAGGCCCCGAGTCCGCCGAGCTCTGCCC
TCCCATTGGGCTGCACCCAGAGAGGGTGAGCTACGTCCCTGGGGCCACAGGGCACAACCTTACCCTCCACCTG
CGGAAGAACAGGGACCTGCTGGGCTCCGGCTACACAGAGACCTATACGGCTGCCAATGGCTCCGAGGTGACGGAG
CAGCCTCGCGGGCAGGACCACTGCTTCTACCAGGGCCACGTAGAGGGGTACCCGGACTCAGCCGCCAGCCTCAGC
ACCTGTGCCGGCTCAGGGGTTTCTTCCAGGTGGGGTCAGACCTGCACCTGATCGAGCCCCCTGGATGAAGGTGGC
GAGGGCGGACGGCAGCCGTGTACCAGGCTGAGCACCTGCTGCAGACGGCCGGGACCTGCGGGGTGACGGACGAC
AGCCTGGGCAGCCTCCTGGGACCCCGGACGGCAGCCGTCTTCAGGCCTCGGCCGGGGACTCTCTGCCATCCCGA
GAGACCCTGCTACGTGGAGCTGTATGTGGTCTGGACAATGCAGAGTTCAGATGCTGGGGAGCGAAGCAGCCGTG
CGTCATCGGGTGTGGAGGTGGTGAATCACGTGGACAAGCTATATCAGAACTCAACTTCCGTGTGGTCTCTGGT
GGCCTGGAGATTTGGAATAGTCAGGACAGGTTCCACGTACGCCCCGACCCAGTGTACACTGGAGAACCTCCTG
ACCTGGCAGGCACGGCAACGGACACGGCGGCACCTGCATGACAACGTACAGCTCATCAGGGGTGTGCACTTCACC
GGGACTACCGTGGGGTTTGCCAGGGTGTCCGCCATGTGCTCCACAGCTCAGGGGCTGTGAACCAGGACCACAGC
AAGAACCCCGTGGGCGTGGCCTGTACCATGGCCCATGAGATGGGCCACAACCTGGGCATGGACCATGATGAGAAC
GTCCAGGGCTGCCGCTGCCAGGAACGCTTCGAGGCGGGCCGCTGCATCATGGCGGGCAGCATTGGCTCCAGTTTC
CCCAGGATGTTCACTGACTGCAGCCAGGCCTACCTGGAGAGCTTTTGGAGCGGGCCAGTCCGTGTGCCCTGCC
AACGCCCCCTGACCTCAGCCACCTGGTGGGCGGGCCCGTGTGTGGGAACCTGTTGTGGAGCGTGGGGAGCAGTGC
GACTGCGGCCCCCGAGGACTGCCGGAACCGCTGCTGCAACTCTACCACCTGCCAGCTGGCTGAGGGGGCCAG
TGTGCGCACGGTACCTGCTGCCAGGAGTGCAAGGTGAAGCCGGCTGGTGAGCTGTGCCGTCCCAAGAAGGACATG
TGTGACCTCGAGGAGTTCTGTGACGGCCGGCACCCTGAGTGCCCGGAAGACGCCCTCCAGGAGAACGGCACGCCC
TGCTCCGGGGGCTACTGCTACAACGGGGCCTGTCCACACTGGCCAGCAGTGCCAGGCCTTCTGGGGGCCAGGT
GGGCAGGCTGCCGAGGAGTCTGCTTCTCCTATGACATCCTACCAGGCTGCAAGGCCAGCCGGTACAGGGCTGAC
ATGTGTGGCGTTCTGCACTGCAAGGGTGGGCAGCAGCCCCCTGGGGCGTGCCATCTGCATCGTGGATGTGTGCCAC
GCGCTCACACAGAGGATGGCACTGCGTATGAACAGTGCCCGAGGGCAGCCGGTGTGGACCAGAGAAGGTTTGC
TGGAAGGACGTTGCCAGGACTTACACGTTTACAGATCCAGCAACTGCTCTGCCAGTGCCACAACCATGGGGTG
TGCAACCACAAGCAGGAGTGCCACTGCCACGCGGGCTGGGCCCGCCCCACTGCGCGAAGCTGTGACTGAGGTG
CACGCAGCGTCCGGGAGCCTCCCCGTCTTCGTGGTGGTGGTTCTGGTGCTCCTGGCAGTTGTGTGGTCACCCTG
GCAGGCATCATCGTCTACCGCAAAGCCCGGAGCCGCATCCTGAGCAGGAACGTGGCTCCCAAGACCACAATGGGG
CGCTCCAACCCCTGTTCCACCAGGCTGCCAGCCGCGTGCCGGCCAAGGGCGGGGCTCCAGCCCCATCCAGGGGC
CCCCAAGAGCTGGTCCCCACCACCCACCGGGCCAGCCCGCCCCGACACCCGGCCTCCTCGGTGGCTCTGAAGAGG
CCGCCCCCTGCTCCTCCGGTCACTGTGTCCAGCCCACCCTTCCAGTTCTGTCTACACCCGGCAGGCACCAAAG
CAGGTCATCAAGCCAACGTTTCGACCCCCAGTGCCCCAGTCAAACCCGGGGCTGGTGCGGCCAACCTGGTCCA
GCTGAGGGTGTGTTGGCCCAAAGGTTGCCCTGAAGCCCCCATCCAGAGGAAGCAAGGAGCCGAGCTCCACAG
CACCTAGGGGGGCACCTGCGCTGTGTGGAAATTTGGAGAAGTTGCGGCAGAGAAGCCATGCGTTCAGCATTC
CACGGTCCAGCTAGTGCCGCTCAGCCCTAGACCCTGACTTTGCAGGCTCAGCTGCTGTTTAACTCAGGAATGC
ATCTACCTGAGAGGCTCCTGCTGTCCACGCCCTCAGCCAATTCTTCTCCCGCCTTGCCACGTGTAGCCCCAG
CTGTCTGCAGGCACAGGCTGGGATGAGCTGTGTGCTTGGGGTGGTGTGTGTGTACGTGTCTCCAGGTGGCCG
CTGGTCTCCCGCTGTGTTCAGGAGGCCACATATACAGCCCCCTCCAGCCACACCTGCCCTGCTCTGGGGCTGC
TGAGCCGGCTGCCCTGGGCACCCGGTTCAGGCAGCACAGAGCTGGGGCATCCCAAGAACTCCATCCAGGA
CCAGGTTCCCTGCGTGTCTTTCGAGAGGGTGTGAGTGCAGAGCTGCACCCCAAGCTCCCGACTCCAGGTCCCC
TGATCTTGGGGCTGTTTCCCATGGGATTCAAGAGGGACAGCCCCAGCTTTGTGTGTGTTAAGCTTAGGAATCG
CCTTTATGGAAGGGCTATGTGGGAGAGTCAGCTATCTTGTCTGGTCTTCTTGAGACCTCAGATGTGTGTTAGC
AGGGCTGAAAGCTTTTATTCTTTAATAATGAGAAATGTATATTTTACTAATAAATTATTGACCGAGTCTGTAGA
TTCTTGTTAGA

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FIGURE 3104

**ATGGGCCAGAATGTTGCAGATTACATGTGCTACTTAATGCAAGAAGATGAAGATGCTTACAAGAAACAGTTCTCT
CAATACATAAAGAACAGCGTAACTCCAGACATGAGAGATAAGAAAGCTCATGCTGCTCTACAAGAGAATCCAGGC
TATGAGAAGAAGCCCAAGAAAGAAGTTCGAAAGAAGAGGCAAAACCGTCCCAAAATGGCCTTTGCTCAGAAGAAA
GTTTCGGGTAGCTCAAAGAAGGCAAGCTTCCTTGGAGCTCAGGAGCTGCTTGA**

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FIGURE 3105

MGQNVADYMCYLMQEDEDAYKKQFSQYIKNSVTPDMRDKKAHAALQENPGYEKKPKKEVRKKRQNRPKMAFAQKK
VRVAQRRQASLELRSC

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FIGURE 3106

TCTAATACCTATTGATCTGTTACTTTCTCCCATCAGCTCAGGTGGGACCATCCAGTTGCAGGAAAACAAGCTTA
ACACGCCCCACTGATTCTACATTATGGTGAGTTCTATGATTATTTTATTATATATTACAGTGTAATAATGGAAATA
AAGTGCCTAATAAATGCAAATGTGCTTACATCTTTTGGCCCAGCTCCTACCTCCCGGCAGCCTCTCCAGGCCCAG
AACTTTCTCCAGTCAGCCTCTACAGACCAAGATCATGACTCACAATGGCCTATTTAGGCCCATAACCCTACGTCAC
GGCAGCCTCCACAGATGAGGCTACTGCCTCACAACAGCCTCCACAGGCACAGCTCCATCGTTACAATGGCCTCTT
TAGACCCAGCTCCTGCCTCCCAGCCTTCTCTCCAGGCCCTGAACTTTCTCAAGTCGACCTCACCAGGCCCAGGTC
ATGCTTCTTTGCAGCCTCTCCAGGCCCAGCTCCTGCATCTTGGTGGCCCCCTCCAGGCCCAGCCTCTGCCTCCCGT
CAGCCTCTACAGTCCCAACGTCTGCCTCACAGCAGATTCTTCAGCCCCAGCATCTACCTCACTTGGACCCTCCAG
ACCCAGATGGTGTCTCACTGTGGCATCCTCAGGCGAAGCTCCTGCCTTTTGGCAGCCTCTCCAGGCCCAGCTCCT
CCTGCCTCCCAGTGGCCTCTTTCGGCCCAGCCCAGCTCATGCCTCCCGGCGGCCTTCCCAAGCCCCGCTTTTGAC
TTTCGGTGGCCTCTGCAGGCCTCGACAAGGCCAGCCTCCTGCCTCCCGAAGGCCTGCACAGGCCCAGCCTCTGC
CTCACAGCGGACTCTC

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FIGURE 3107

CGGCCGCCCCGCGACTGCGCCACGTCTGAGGCGGCTGTGGCCACGTCTGAGGCGGCTGTGGCCGCGTCGGTGTC
CGCGTCGAGGAGCCGGGGCAGGGCACCAATGGCGGACTGGGCTCGGGCTCAGAGCCCGGGCGCTGTGGAAGAGATT
CTAGACCGGGAGAACAAGCGAATGGCTGACAGCCTGGCCTCCAAAGTCACCAGGCTCAAATCGCTCGCCCTGGAC
ATCGATAGGGATGCAGAGGATCAGAACCGGTACCTGGATGGCATGGACTCGGATTTACAAGCATGACCAGCCTG
CTTACAGGGAGCGTGAAGCGCTTTTCCACAATGGCAAGGTCCGGACAAGACAACCGGAAGCTTCTATGTGGCATG
GCCGTGGGTCTAATTGTGGCCTTCTTCATCCTCTCCTACTTCTTGTCCAGGGCAAGGACGTTGAGCCAGTGGGAGC
TGGTGCTGTGGGTGCCAAGGGCAGCCAGCGGTCTTCCCTGCCTGGTGTTTTGGGCTCCACAGGACTTACCTACA
AAATACTCCTTTGCAATGAT

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FIGURE 3108

MADWARAQSPGAVEEILDRENKRMADSLASKVTRLKSLALDIDRDAEDQNRYL DGMDSDFTSMTSLLTGSVKRFS
TMARSGQDNRKLLCGMAVGLIVAFFILSYFLSRART

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FIGURE 3109

CGGGGCCGGCGAACTGCGGCCCGGAACGGCTGAGGAAGGGCCCGTCCCGCCTTCCCCGGCGCGCCATGGAGCCCC
GGGCGGTTGAGAAAGCCGTGGAGACGGGTGAGGAGGATGTGATTATGGAAGCTCTGCGGTATACAAACCAGGAGC
ACTCCCAGAGCTTACGTTTGTATGATGCCAACAGGAGGACCGGAAGAGACTGGCGGAGCTGCTGGTCTCCGTCC
TGGAACAGGGCTTGCCACCCTCCCACCGTGTCTGCTGAGAGTGTCCGAATCCTGTCCCGGAGCCGCAACT
GCCTGGACCCGTTACACAGCCGCCAGAGCCTGCAGGCACTAGCCTGCTATGCTGACATCTCTGTCTCTGAGGGGT
CCGTCCCAGAGTCCGCAGACATGGATGTTGTACTGGAGTCCCTCAAGTGCCTGTGCAACCTCGTGCTCAGCAGCC
CTGTGGCAGAGATGCTGGCAGCAGAGGCCCGCCTAGTGGTGAAGCTCACAGAGCGTGTGGGGCTGTACCGTGAGA
GGAGCTTCCCCACGATGTCCAGTTCTTTGACTTGC GGCTCCTCTTCTGCTAACGGCACTCCGCACCGATGTGC
GCCAGCAGCTGTTTCAGGAGCTGAAAGGAGTGC GGCTGCTAACTGACACACTGGAGCTGACGCTGGGGGTGACTC
CTGAAGGGAACCCCCACCCACGCTCCTTCTTCCCAAGAGACTGAGCGGGCCATGGAGATCCTCAAAGTGCTCT
TCAACATCACCCCTGGACTCCATCAAGGGGGAGGTGGACGAGGAAGACGCTGCCCTTTACCGACACCTGGGGACCC
TTCTCCGGCACTGTGTGATGATCGCTACTGCTGGAGACCGCACAGAGGAGTCCACGGCCACGCAGTGAACCTCC
TGGGGAACCTTGCCCTCAAGTGTCTGGATGTTCTCTCACCCTGGAGCCACATGGAGACTCCACGGAGTTTATGG
GAGTGAATATGGATGTGATTCTGTGCCCTCCTCATCTTCTAGAGAAGCGTTTGACACAAGACACAGGCTGAAGG
AGAGTGTAGCTCCCGTGTGAGCGTGTGACTGAATGTGCCGGATGCACCGCCAGCCAGGAAGTTCTTGAAGG
CCCAGGTGCTGCCCCCTCTGCGGGATGTGAGGACACGGCCTGAGGTTGGGGAGATGTGCGGAACAAGCTTGTCC
GCCTCATGACACACCTGGACACAGATGTGAAGAGGGTGGCTGCCGAGTTCTTGTGTTGCTGTGCTCTGAGAGTG
TGCCCCGATTTCATCAAGTACACAGGCTATGGGAATGCTGCTGGCCTTCTGGCTGCCAGGGGCCCTCATGGCAGGAG
GCCGGCCCCGAGGGCCAGTACTCAGAGGATGAGGACACAGACACAGATGAGTACAAGGAAGCCAAAGCCAGCATAA
ACCCTGTGACCGGGAGGGTGGAGGAGAAGCCGCCAACCCTATGGAGGGCATGACAGAGGAGCAGAAGGAGCACG
AGGCCATGAAGCTGGTGACCATGTTTGACAAGCTCTCCAGGAACAGAGTCATCCAGCCAATGGGGATGAGTCCCC
GGGTCATCTTACGTCCCTGCAGGATGCCATGTGCGAGACTATGGAGCAGCAGCTCTCCTCGACCCCTGACTCGG
ACCCTGACTGAGGATGGCAGCTCTTCTGCTCCCCCATCAGGACTGGTGTGCTTCCAGAGACTTCTTGGGGTTG
CAACCTCGGGAAGCCACATCCCCTGAGTCCACACCCGCCCCCACTTCTCCATCTTAGAAACCCCTTCTCTTGAC
TCCCGTTCTGTTTCATGATTTGCCTCTGGTCCAGTTTCTCATCTCTGGACTGCAACGGTCTTCTTGTGCTAGAACT
CAGGCTCAGCCTCGAATTCCACAGACGAAGTACTTTCTTTTGTCTGCGCCAAGAGGAATGTGTTTCAAGAGCTGCT
GCCTGAGGGCAGGGCCTACCTGGGCACACAGAAGAGCATATGGGAGGGCAGGGGTTTGGGTGTGGGTGCACACAA
AGCAAGCACCATCTGGGATTGGCACACTGGCAGAGCCAGTGTGTTGGGGTATGTGCTGCACTTCCAGGGAGAAA
ACCTGTGAGAACTTTCATACGAGTATATCAGAACACACCCTTCCAAGGTATGTATGCTCTGTTGTTCTGTCTCT
GTCTTCACTGAGCGCAGGGCTGGAGGCCTCTTAGACATTCTCCTTGGTCTCGTTTCACTGCCCCACTGTAGTATC
CACAGTGCCCCGAGTTCTCGCTGGTTTTGGCAATTAAACCTCCTTCTTACTGGTTTACTACTACACTTACAACAAGG
AAAATGCCCTCTGTGTGACCATAGATTGAGATTTATACCACATACCACACATAGCCACAGAAACATCATCTTGAA
ATAAAGAAGAGTTTTGGACAAAAA

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FIGURE 3110

MEPRAVAEAVETGEEDVIMEALRSYNQEHSSQSTFDDAQQEDRKRLAELLVSVLEQGLPPSHRVIWLQSVRILSR
DRNCLDPFTSRQSLQALACYADISVSEGSVPESADMDVVLESCLKCLCNLVLSSPVAQMLAAEARLVVKLTERVGL
YRERSFPHDVQFFDLRLLELLTALRTDVRQQLFQELKGVRLLTDTLELTGVTPEGNPPPTLLPSQETERAMEIL
KVLFNITLDSIKGEVDEEDAALYRHLGTLRHCVMIAATAGDRTEEFHGHAVNLLGNLPLKCLDVLLTLEPHGDST
EFMGVNMDVIRALLIFLEKRLHKTHRLKESVAPVLSVLTECARMHRPARKFLKAQVLPPLRDVTRPEVGEMLRN
KLVRLMTHLDTDVKRVAAEFLFVLCSESVPRIKYTGYGNAAGLLAAGLMAGGRPEGQYSEDEDTDDEYKEAK
ASINPVTGRVEEKPPNPMEGMTEEQKEHEAMKLVTMFDKLSRNRVIQPMGMSPRGHLTSLQDAMCETMEQQLSSD
PDSDPD

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FIGURE 3111

TTTCCGGCAGCCATCCCCGCGGTGCTGACATCCCGGTTGTTCTTCTGTGCCGGGGGTCTTCCTGCTGTCATGAAG
GACGTACCGGGCTTCCTACAGCAGAGCCAGAGCTCCGGGCCCGGCAGCCCGCTGTGTGGCACCCTCTGGAGGAG
CTCTACACGAAGAAGTTGTGGCATCAGCTGACACTTCAGGTGCTTGATTTTGTGCAGGATCCGTGCTTTGCCCAA
GGAGATGGTCTCATTAAGCTTTATGAAAACCTTTATCAGTGAATTTGAACACAGGGTGAATCCTCTGTCCCTCGTG
GAAATCATTCTTCACGTAGTTAGACAGATGACTGATCCTAATGTGGCTCTTACTTTTCTGGAAAAGACTCGTGAG
AAGGTGAAAAGTAGTGATGAGGCAGTGATCCTGTGTAAAACAGCAATTGGAGCTCTAAAATTAAACATCGGGGAC
CTACAGGTTACAAAGGAAACAATTGAAGATGTTGAAGAAATGCTCAACAACCTTCCTGGTGTGACATCGGTTTAC
AGTCGTTTCTATGATCTCTCCAGTAAATACTATCAAACAATCGGAAACCACGCGTCCTACTACAAAGATGCTCTG
CGGTTTTTGGGCTGTGTTGACATCAAGGATCTACCAGTGTCTGAGCAGCAGGAGAGAGCCCTTCACGCTGGGGCTA
GCAGGACTTCTCGGCGAGGGAGTTTTTAACCTTTGGAGAACTCCTCATGCACCCTGTGCTGGAGTCCCTGAGGAAT
ACTGACCGGCAGTGGCTGATTGACACCCTCTATGCCTTCAACAGTGGCAACGTAGAGCGGTTCCAGACTCTGAAG
ACTGCCTGGGGCCAGCAGCCTGATTTAGCAGCTAATGAAGCCAGCTTCTGAGGAAAATTTCAGTTGTTGTGCCTC
ATGGAGATGACTTTCACACGACCTGCCAATCACAGACAACCTCACTTTTGAAGAAATTGCCAAAAGTGCTAAAATC
ACAGTGAATGAGGTGGAGCTTCTGGTGATGAAGGCCCTTTCCGGTGGGGCTGGTGAAAGGCAGTATAGACGAGGTG
GACAAACGAGTCCACATGACCTGGGTGCAGCCCCGAGTGTGGATTTGCAACAGATCAAGGGAATGAAGGACCGC
CTGGAGTTCTGGTGCACGGATGTGAAGAGCATGGAGATGCTGGTGGAGCACCAGGCCCATGACATCCTCACCTAG

GGCCCCCTGGTTCCCCGTCGTGTCTCCTTTGACTCACCTGAGAGAGGCATTTGCAGCCAATGAAGCTGGCTGCTC
AGACGGTGCACATTGAATTTGGGTGGGGGTTGGGATCCTGTCTGAAGTACAGACTGTCCCTGCTCTAAAAACAGG
ACTGTCCCTGATGGGAGCCAGGCCACAGGGAGGAGGCTTCTTTGTGGGTCTCTCCTGCAGAGGTGGGGGTCTCA
GGGTCTTAGGTGATACGGGAGAGAAAGAACGTGCCAGGCAGGAGGCCCTGAAGTCTGTGTACTCCGAGGTGGA
TCTCCATCCCCATCCACCTGTACGGACATCTTTTCCGTTGTGGTTTGAAGATGTTCTATAATAAACCCCTCTGC
TTTGTT

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FIGURE 3112

MKDVP GFLQQSQSSGPGQPAVWHRLEELYTKKLWHQLTLQVLD FVQDPCFAQGDGLIKLYENFISEFEHRVNPLS
LVEIILHVVRQMTDPNVALTFLEKTRKVKSSDEAVILCKTAIGALKLNIGDLQVTKETIEDVEEMLNNLPGVTS
VHSRFYDLSSKYYQTIGNHASYYKDALRFLGCVDIKDLPVSEQQERAFTLGLAGLLGEGVFNF GELLMHPVLES
RNTDRQWLIDTLYAFNSGNVERFQTLKTAWGQQPDLAANEAQLLRKIQLLCLMEMTFTRPANHRQLTFEEIAKSA
KITVNEVELLVMKALSVGLVKGSIDEVDKRVHMTWVQPRVLDLQQIKGMKDRLEFWCTDVKSMEMLVEHQHDIL
T

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FIGURE 3113

CAACACAGGGGCAGTCTCCAGGACCTCCACACCATTAAACAAGATGAGCCTTGTGCTCCCTTGGGCTCTAGAGAGG
AAGCCCCTCTGAGCCCTCAGCCCCTCTTTCCCTCCCTCTCCTAAAGTAATTTGATCCTCAGGAATTTGTTCTGCCC
TCATCTGGCCCTGGCCAGCTCTGCATTTGACAAATGCCAGGAAGAGGAAACTGTTGAGAAAACGGAACTACTGGG
GAAAGGGAGGGCTCACTGAGAACCATCCCGGTAACCCGACCGCCGCTGGTCACCATGAACCACATTGTGCAAACC
TTCTCTCCTGTCAACAGCGGCCAGCCTCCCAACTACGAGATGCTCAAGGAGGAGCAGGAAGTGGCTATGCTGGGG
GGGCCCCACAACCCTGCTCCCCGACGTCCACCGTGATCCACATCCGCAGCGAGACCTCCGTGCCTGACCATGTC
GTCTGGTCCCTGTTCAACACCCCTCTTCATGAACACCTGCTGCCTGGGCTTCATAGCATTCGCCTACTCCGTGAAG
TCTAGGGACAGGAAGATGGTTGGCGACGTGACCGGGGCCAGGCCTATGCCTCCACCGCCAAGTGCCTGAACATC
TGGGCCCTGATTTTGGGCATCTTCATGACCATTCTGCTCGTCATCATCCCAGTGTGGTCCGTCCAGGCCAGCGA
TAGATCAGGAGGCATCATTGAGGCCAGGAGCTCTGCCCCTGACCTGTATCCCACGTACTCTATCTTCCATTCTC
GCCCTGCCCCCAGAGGCCAGGAGCTCTGCCCTTGACCTGTATTCCACTTACTCCACCTTCCATTCTCGCCCTGT
CCCCACAGCCGAGTCTGCATCAGCCCTTTATCCTCACACGCTTTTCTACAATGGCATTCAATAAAGTGTATATG
TTTCT

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FIGURE 3114

MNHIVQTFSPVNSGQPPNYEMLKEEQEVAMLGGPHNPAPPTSTVIHIRSETSVDPDHVVWSLFNTLFMNTCCLGFI
AFAYSVKSRDRKMVGDTVGAQAYASTAKCLNIWALILGIFMTILLVLIIPVLVVQAQR

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FIGURE 3115

TTTAACACCCATAGTAGGCCTAAAAGCAGCCACCAATTAAGAAAGCCACAGCACGTACACCCACTCCAGGGATCT
GCCAGCACCTGTGGGGCCCAGACTACAGGCTGATGGCGGAGGCTTCGAGTGACCCGGGTGCTGAGGAGCGGGAA
GAGTTGCTGGGGCCCAGTCTCAGTGGAGCGTGGAGGACGAGGAGGAGGCCGTCCACGAGCAATGCCAGCATGAG
AGAGACAGGCAGCTTCAGGCCCAGGACGAGGAGGGAGGCGGCCATGTCCCCGAGCGGCCGAAGCAGGAGATGCTC
CTCAGCCTGAAGCCCTCGGAGGCCCTGAACTGGATGAGGACGAGGGCTTTGGCGACTGGTCCCAGAGGCCAGAG
CAGCGGCAGCAGCAGAGGGGGCGCAGGGCGCCTTGACAGCGGAGAGCCCCCAGTGCAAGGAGTCTTGAGGGG
GAGCAAGAGGACAGGCCCGGCCCTGCATGCCTACGAAAAGGAGGACAGTGATGAAGTCCACCTGGAGGAGTTGAGT
CTGAGCAAGGAGGGGCCAGGCCCAGAGGACACTGTCCAGGACAACCTGGGGGCCGAGGGGCTGAGGAGGAACAG
GAGGAGCACCAGAAATGTCAGCAGCCCAGGACACCCAGCCCCCTTGGTCTTGAGAGGGGACCATCGAACAGAGCTCG
CCTCCCCTGAGCCCTACCACCAAACCTCATCGACAGGACCGAGTCCCCTAAACCGCTCCATAGAGAAGAGTAACAGT
GTGAAGAAATCCAGCCAGACTTGCCCATCTCCAAGATTGATCAGTGGCTGGAACAATACACCCAGGCCATCGAG
ACCGCTGGCCGGACCCCCAAGCTAGCCCCGCCAGGCCTCCATAGAGCTGCCCAGCATGGCTGTGGCCAGTACCAAG
AGTCGGTGGGAGACGGGTGAGGTACAGGCTCAGTCTGCGGCCAAGACTCCGTCCTGCAAGGATATTGTGGCTGGA
GACATGAGCAAGAAAAGCCTCTGGGAGCAGAAGGGAGGCTCCAAGACCTCATCAACAATTAAGAGCACCCCATCT
GGGAAGAGGTATAAGTTTGTGGCCACCGGGCATGGGAAGTATGAGAAGGTGCTTGTGGAAGGGGGCCCGGCTCCC
TAGGGCTCCCATCTCGCTTCCTGGGTCTGCAGGTCCAGCCGGCTGGCACCCCTCCATGTACCCAGGGGAGATTCCA
GCCAGACACCCGCCCCCGGCCCTGGCTAAGAAGTTGCTTCCTGTTGCCAGCATGACCTACCCTCGCCTCTTTGA
TGCCATCCGCTGCCACCTCCTTTTGCTCCTGGACCCTTTAGCCTCTCTGCCCTTCCACTCTCTGACCACCGCCCC
CGCCCTCCCCACCCAGCTCCGCTTCTTGTTACTTGGGGGAGGAAAGAACTCCTGATCATTGGCCAAAGGGACTT
ACCCCTGGAGAGGCCAAGTGCCTTCTAGGAAGTTAGGAGGTTAGGCACAGCCTGTGCAGAGAGGGTGGGTACC
CCCCAGATCCAAGGGGAACTGCAGGTCAAGGGCTGATAACGGCCATGCAGGATGCTTGATGCTGCGTCCCCCG
CTGCTTGCCGCCCCCCCACCCGCCATTTTGTATAATAAAGCTCCCTGTGTATTCTC

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FIGURE 3116

MAEASSDPGAEEREELLGPTAQWSVEDEEEAVHEQCQHERDRQLQAQDEEGGHHVPERPKQEMLLSLKPSEAPEL
DEDEGF GDWSQRPEQRQQHEGAQGALDSGEPPQCRSPEGEQEDRPGLHAYEKEDSDEVHLEELSLSKEGPGPEDT
VQDNLGAAGAEEEQEEHQKCQQPRTPSPLVLEGTIEQSSPPLSPTTKLIDRTESLNRSIEKSNSVKKSQPDLPIS
KIDQWLEQYTQAIETAGRTPKLARQASIELPSMAVASTKSRWETGEVQAQSAAKTPSCKDIVAGDMSKSLWEQK
GGSKTSSTIKSTPSGKRYKFVATGHGKYEKVLVEGGPAP

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FIGURE 3117

TTGCTGTAACAGTGTTTATTGATGATGAGTCCAGGGCTCCTGCTGAAGCCCTGGTGGGGAGGGGCACAGAGCGAG
ATGGGGCGTAATGGAATGCTTGAAGGCTGCTCCGTGATGTCGGTCGGAGCTTCCAGACTAGGCGAGGGCAGGGTG
AGGCCTCGGGCACACAGCCGGCGCCAGTCACCCGGCCAGATGGAGGGCGGGCCGGGCCCTGCACAGGCACCTGC
CAAGGTGGCTCACACTCACGCACACTCGTACTGAGACTCAAGGCCGTCTCCACAACCCAACCAAGTGCAAAATGAC
TTAGTGCAAATTAAATTGAGAAGGGACGGGGGAAACAGAGTCGTGGAGGCTTTGAATCTCTCAGAAAAAGGAAA
GACAGGAAAGCTCAGAAACAAAGAGACAGAAGGATGAAAAAGAAGAAGAGGGAGGTGGTGGGGACGGCGTCATCC
CGCTGGAGGAGCTCAGCTCTGGGATGATGTGGTGGCTGGTGGTCAACCGTCCGCCGCAGGGGGTGGCCATGAAGA
TGGAGTCGCCGGTGCGGGGTGGGTGCTGCGGGCGCTGCTGTTCCGATGGTGTCTTTGATGTTGGGCTGATGAGGT
CTGGTTCCTCTAGCTTCCAGAGCCGATTCTGAGTCAGGTAGTGCAGTGGTTGTAAAGTGCAGCATATTCATTTC
CAAGCTAGAGGGTTTTGTGTCCGGATTCAAAGGCCAGGCTTGAGCTGGGTAGCACCATTCTTTTCATGTTGTGG
GTTCTGGGAGCCCAGAGGGCAGCCATAGTGTGCCGACTCCGTGGAGGAAGTAAAGAAACAGACCCGCTTCTTGCC
GCAGCCCCACCAGCCTAAGGTGTTAGGAAGGCCGGACGCGCCTCCTCTGTCTCGCCGTCACACCGGACCATGT
CATGTCTGCTTGTACGTCCACCGGACCTGGCGTCTTGGCCTTCGGCAGCTGGTGGGCACGTCCACCCAGCTG
GAGACCTGGCCTCGTCTCCAGCCCGAACGCTGAGGCACCGATCCCGGCTCCGTCGCCGCCCGCAGGCCCCGCCTT
GGCCACGGGCTCTGGAGGCCAGTGCTCCCGCTCGCCGCCCGCTGCGCTCCTCACCCTGCCTGCACCATCCTCC
CTCCTGAGAGCTCATTCACTCCGCCCCGCCCCGCTCGCCTAGTCTGGTCTCGCCCCATGCCCTTGACTCCCCTG
ATGCTGTACTGTCTGCCAAGCCAGCCCCAGGGGCTGAGCGGTGAGGGCATAACAGCGTCACCAAGTCCACTGTGGG
CCCTCTCCGCACCAGACCCTGGGCCGAGTGCCTCGTGGGAC

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FIGURE 3118

MMSPGLLLLKPWWGGAQSEMGRNGMLEGCSVMSVGASRLGEGVRPRAHSRRPVTRPRWRAAGPCTGTCQGGSHSR
TLVLRLKAVSTTPTSANDLVQIKFRDGGNRVVEALNLSEKRKDRKAQKQDRRMKKKKREVVGTTASSRWRSSAL
G

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FIGURE 3119

GGGGCCAGACGCCAAGAGGGGCGCGGGGAGCACAGAGAAGCGGAGGGAAGGGCGCCACGTCGAGGGGCGGGGGA
GGCGGTGACTGGGGGGCGGAGTGGAGGCTGCACCCGGACCGCGGGCGCCAGCTCGGTTTGGGCCGACGGAGCCC
TCTGCCGTCGCGAGCCCGGGCCTCGGGAGGGGGACAGGCGGTGGCGGCACCGGGGCGCTCCGGGACGCAGCGCG
GAAAGGGGAGCGGCCCAGGCTGCGCGCCGGGGGGAGGGCTGGAGGGGGAGCGCTTTGGGGGGTTACAACGCCGG
CGGCCTGCGAGCCGGA CTGCCTGCGGGGGGAACCGCCTCCTCGGGCGAAGCGGGGATGGGGGGAGTTGAGGTAGA
TGAAGAGGAGGCGGGCGGGGAATCCG CAGGCCCGGCGGAGCGCGACCCCGCGGACGGCGCCCGGGACGGGAGTCAG
CAGCGAGGCAGCGGGCGGCGTCGACGCGGGGCCGCTTGCCCGATGGAGGCGCTGGTGGGCAGAGCGCGGGCAGG
CGTGGGCCAGGAGGCGGGGGCGGCCGGAAGGGGGGGCCGGGGCCGGCCGGGCCTCACGCAGCTCCGCCG

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FIGURE 3120

TTCTCCCGCAACCTTCCCTTCGCTCCCTCCCGTCCCCCCCAGCTCCTAGCCTCCGACTCCCTCCCCCCTCACGC
CCGCCCTCTCGCCTTCGCCGAACCAAAGTGGATTAATTACACGCTTTCTGTTTCTCTCCGTGCTGTTCTCTCCCG
CTGTGCGCCTGCCCGCTCTCGCTGTCTCTCTCCCCCTCGCCCTCTCTTCGGCCCCCCTTTTCAGTTCACTC
TGTCTCTCCCACTATCTCTGCCCCCTCTATCCTTGATAACAACAGCTGACCTCATTTCGCCGATACCTTTTCCCC
CCGAAAAGTACAACATCTGGCCCCCCCCAGCCCCGAAGACAGCCCGTCTCCCTGGACAATCAGACGAATTCTCCC
CCCCCCCCCAAAAAAAAAAAGCCATCCCCCGCTCTGCCCCGTGCGACATTGGCCCCCGCGACTCGGCCAGAGCG
GCGCTGGCAGAGGAGTGTCGGCAGGAGGGCCAACGCCCGCTGTTTCGGTTTTCGACACGCAGCAGGGAGGTGGGC
GGCAGCGTCGCCGGCTTCCAGACACCAATGGGAATCCCAATGGGGAAGTCGATGCTGGTGCTTCTCACCTTCTTG
GCCTTCGCCTCGTGCTGCATTGCTGCTTACCGCCCCAGTGAGACCCTGTGCGGCGGGGAGCTGGTGGACACCCTC
CAGTTCGCTCTGTGGGGACCGCGGCTTCTACTTCAGCAGGCCCCGCAAGCCGTGTGAGCCGTGCGAGCCGTGGCATC
GTTGAGGAGTGCTGTTTCCGCAGCTGTGACCTGGCCCTCCTGGAGACGTACTGTGCTACCCCGCCAAGTCCGAG
AGGGACGTGTCGACCCCTCCGACCGTGCTTCCGGACAACCTCCCCAGATACCCCGTGGGCAAGTTCTTCCAATAT
GACACCTGGAAGCAGTCCACCCAGCGCCTGCGCAGGGGCCTGCCTGCCCTCCTGCGTGCCCGCCGGGGTACAGTG
CTCGCCAAGGAGCTCGAGGCGTTCAGGGAGGCCAAACGTACCGTCCCCTGATTGCTCTACCCACCCAAGACCCC
GCCCACGGGGGCGCCCCCCCAGAGATGGCCAGCAATCGGAAGTGAGCAAAACTGCCGCAAGTCTGCAGCCCGGCG
CCACCATCCTGCAGCCTCCTCCTGACCACGGACGTTTCCATCAGGTTCCATCCCGAAAATCTCTCGGTTCCACGT
CCCCCTGGGGCTTCTCCTGACCCAGTCCCCGTGCCCCGCTCCCCGAAACAGGCTACTCTCCTCGGCCCCCTCCA
TCGGGCTGAGGAAGCACAGCAGCATCTTCAAACATGTACAAAATCGATTGGCTTTAAACACCCTTCACATACCCT
CCCCC

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FIGURE 3121

MGIPMGKSMVLVLLTFLAFASCCIAAYRPSETLCGGELVDTLQFVCGDRGFYFSRPASRVSRRSRGIVEECCFRSC
DLALLETYCATPAKSERDVSTPPTVLPDNFPRYPVGKFFQYDTWKQSTQRLRRGLPALLRARRGHVLAKELEAFR
EAKRHRPLIALPTQDPAHGGAPPEMASNRK

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FIGURE 3122

CATACATGAACACAGCTCACAGCACACAAACACGCAGCCCCGACTAGCAGTCTAGAGGCCTGAGGCTTCTGGGTCC
TGGTGACGGGGCTGGCATGACCCCGGGGGTCGTCCATGCCAGTCCGCCTCAGTCGCAGAGGGTCCCTCGGCAAGC
GCCCTGTGAGTGGGCCATTTCGGAACATTGGACAGAAGCCCAAAGAGCCAAATTGTCACAATTGTGGAACCCACAT
TGGCCTGAGATCCAAAACGCTTCGAGGCACCCCAAATTACCTGCCCATTTCGTCAGGACACCCACCCACCCAGTGT
TATATTCTGCCTCGCCGGAGTGGGTGTTCCCGGGGGCACTTGCCGACCAGCCCCCTTGCGTCCCCAGGTTTGCAGC
TCTCCCCTGGGCCACTAACCATCCTGGCCCCGGGCTGCCTGTCTGACCTCCGTGCCTAGTCGTGGCTCTCCATCTT
GTCTCCTCCCCGTGTCCCAATGTCTTCAGTGGGGGGCCCC

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FIGURE 3123

MTPGVVHASPPQSQRVPRQAPCEWAI RNIGQKPKEPNCHNCGTHIGLRSKTLRGTPNYLP I RQDTHPPSVIFCLA
GVGVPGGTCRPAPCVPRFAALPWATNHPGPGCLSDLRA

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FIGURE 3124

CCAAATTAAACCCCCCCCCCATGTAAACAGGGGGGAGTGACAAAAGCAAGAACGCACGAAGCCAGCCTGGAGACC
ACCACGTCTGCCCCCGCCATTTATCGCCCTGATTGGATTTTGTTCATCTGTCCCTGTTGCTTGGGTTGAG
TTGAGGGTGGAGCCTCCTGGGGGGCACTGGCCACTGAGCCCCCTTGAGAGAAGTCAGAGGGGAGTGGAGAAGGCCA
CTGTCCGGCCTGGCTTCTGGGGACAGTGGCTGGTCCCCAGAAGTCCTGAGGGCGGAGGGGGGGGTTGGGCAGGGT
CTCCTCAGGTGTCAGGAGGGTGCTCGGAGGCCACAGGAGGGGGCTCCTGGCTGGCCTGAGGCTGGCCGGAGGGGA
AGGGGCTAGCAGGTGTGTAAACAGAGGGTTCCATCAGGCTGGGGCAGGGTGGCCGCCTTCCGCACACTTGAGGAA
CGGCGGGTCTGAGCCACAGAGCAGGAGAGCTGCCAGGTCTGCCCATCGACCAGGTTGCTTGGGCCCCGGAGCCC
ACGGGTCTGGTGATGCCATAGCAGCCACCACCGCGGCGCCTAGGGCTGCGGCAGGGACTCGGCCCTCTGGGAGGTT
TACCTCGCCCCACTTGTCGCCCCAGCTCAGCCCCCTGCACGCAGCCCGACTAGCAGTCTAGAGGCCCTGAGGCT
TCTGGGTCCTGGTGACGGGGCTGGCATGACCCCGGGGTCGTCCATGCCAGTCCGCCTCAGTCGCAGAGGGTCCC
TCGGCAAGCGCCCTGTGAGTGGGCCATTGGAACATTGGACAGAAGCCCAAAGAGCCAAATTGTCACAATTGTGG
AACCACATTGGCCTGAGCCACCCAGTGTTATATTCTGCCTCGCCGGAGTGGGTGTTCCCGGGGGCACTTGCCG
ACCAGCCCCCTTGCGTCCCCAGGTTTGCAGCTCTCCCCTGGGCCACTAACCATCCTGGCCCGGGCTGCCTGTCTGA
CCTCCGTGCCTAGTCGTGGCTCTCCATCTTGTCTCCTCCCCGTGTCCCAATGTCTTCAGTGGGGGGCCCCCTCT
TGGGTCCCCCT

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FIGURE 3125

CAGGAGGGTGCTCGGAGGCCACAGGAGGGGGCTCCTGGCTGGCCTGAGGCTGGCCGGAGGGGAAGGGGCTAGCAG
GTGTGTAAACAGAGGGTTCCATCGACCAGGTTGCTTGGGCCCCGGAGCCCACGGGTCTGGTGATGCCATAGCAGC
CACCACCGCGGCGCCTAGGGCTGCGGCAGGGACTCGGCCTCTGGGAGGTTTACCTCGCCCCCACTTGTGCCCCCA
GCTCAGCCCCCTGCACGCAGCCCGACTAGCAGTCTAGAGGCCTGAGGCTTCTGGGTCTGGTGACGGGGCTGGC
ATGACCCCGGGGGTTCGTCCATGCCAGTCCGCCTCAGTCGCAGAGGGTCCCTCGGCAAGCGCCCTGTGAGTGGGCC
ATTGGAACATTGGACAGAAGCCCAAAGAGCCAAATTGTCACAATTGTGGAACCCACATTGGCCTGAGATCCAAA
ACGCTTCGAGGCACCCCAAATTACCTGCCCATTGTCAGGACACCCACCCACCCAGTGTTATATTCTGCCTCGCC
GGAGTGGGTGTTCCCGGGGGCACTTGCCGACCAGCCCTTGCGTCCCCAGGTTTGCAGCTCTCCCTGGGCCACT
AACCATCCTGGCCCCGGGCTGCCTGTCTGACCTCCGTGCCTAGTCGTGGCTCTCCATCTTGTCTCCTCCCCGTGTC
CCCAATGTCTTCAGTGGGGGGCCCCCTCTTGGGTCCC

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FIGURE 3126

MTPGVVHASPPQSQRVPRQAPCEWAI RNIGQKPKEPNCHNCGTHIGLRSKTLRGTPNYLP
IRQDTHPPSVIFCLA
GVGVPGGTCTRPAPCVPRFAALPWATNHFGPGCLSDLRA

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FIGURE 3127

AGTGCCTTAGATTCCAGCGAGCTACGCAAGCAATCCTGGCCCAGCCGAGCTTGCTTCCCCAAATCCCGTAATCCT
TGACCTTATTCCCCAAAGAAGCGGCCTCCCGGGAAGGAGCGCCCTGGCGGAGAAGACTCGAACGGCTCCCACAG
CCGGGCGTTGGGGGAAAGGCATGAAGAACTCTTGACTGACAGAAACGGAGGGTGTGTCCAAAGTTTTGAGGACGG
CCGAGCGGCGCTCCAAACCCGTCCTCACAGCCTCGCCCCGTTGCGCTCAGCTACAACAAATCATCGTCAACCTG
TTCCACCTTCTCCAGTCTGGTAGCAAAAAGGGGTGTCTCAGGCCACTCTTCACCTCCACCATGAGCCTGGACATC
CAGAGCCTGGACATCCAGTGTGAGGAGCTGAGCGACGCTAGATGGGCCGAGCTCCTCCCTCTGCTCCAGCAGTGC
CAAGTGGTCAGGCTGGACGACTGTGGCCTCACGGAAGCACGGTGCAAGGACATCAGCTCTGCACCTTCGAGTCAAC
CCTGCACTGGCAGAGCTCAACCTGCGCAGCAACGAGCTGGGCGATGTCGGCGTGCAATTGCGTGCTCCAGGGCCTG
CAGACCCCTCCTGCAAGATCCAGAAGCTGAGCCTCCAGAACTGCTGCCTGACGGGGGCGGGCTGCGGGGTCTCTG
TCCAGCACACTACGCACCTTGCCACCCCTGCAGGAGCTGCACCTCAGCGACAACCTCTTGGGGGATGCGGGCCTG
CAGCTGCTCTGCGAAGGACTCCTGGACCCCCAGTGCCGCTTGAAAAGCTGCAGCTGGAGTATTGCAGCCTCTCG
GCTGCCAGCTGCGAGCCCCCTGGCCTCCGTGCTCAGGGCCAAGCCGACTTCAAGGAGCTCACGGTTAGCAACAAC
GACATCAATGAGGCTGGCGTCCGTGTGCTGTGCCAGGGCCTGAAGGACTCCCCCTGCCAGCTGGAGGCGCTCAAG
CTGGAGAGCTGCGGTGTGACATCAGACAACTGCCGGGACCTGTGCGGCATTGTGGCCTCCAAGGCCTCGCTGCGG
GAGCTGGCCCTGGGCAGCAACAAGCTGGGTGATGTGGGCATGGCGGAGCTGTGCCAGGGCTGCTCCACCCAGC
TCCAGGCTCAGGACCCTGTGGATCTGGGAGTGTGGCATCACTGCCAAGGGCTGCGGGGATCTGTGCCGTGTCTC
AGGGCCAAGGAGAGCCTGAAGGAGCTCAGCCTGGCCGGCAACGAGCTGGGGGATGAGGGTGCCCGACTGCTGTGT
GAGACCCTGCTGGAACCTGGCTGCCAGCTGGAGTCGCTGTGGGTGAAGTCCTGCAGCTTCACAGCCGCTTGCTGC
TCCCCTTCAGCTCAGTGTGGCCAGAACAGTTTCTCCTGGAGCTACAGATAAGCAACAACAGGCTGGAGGAT
GCGGGCGTGCGGGAGCTGTGCCAGGGCCTGGGCCAGCCTGGCTCTGTGCTGCGGGTGCTCTGGTTGGCCGACTGC
GATGTGAGTGACAGCAGCTGCAGCAGCCTCGCCGCAACCTGTTGGCCAACACAGCCTGCGTGAGCTGGACCTC
AGCAACAACCTGCCTGGGGGACGCCGGCATCCTGCAGCTGGTGGAGAGCGTCCGGCAGCCGGGCTGCCTCCTGGAG
CAGCTGGTCCTGTACGACATTTACTGGTCTGAGGAGATGGAGGACCGGCTGCAGGCCCTGGAGAAGGACAAGCCA
TCCCTGAGGGTTCATCTCCTGAGGCTCTTCTGCTGCTGCTCTCCCTGGACGACCGGCTCGAGGCAACCTGGGG
CCCACCAGCCCCTGCCATGCTCTACCCCTGCATATCCTAGGTTTGAAGAGAAACGCTCAGATCCGCTTATTTCTG
CCAGTATATTTTGGACACTTTATAATCATTAAAGCACTTTCTTGGC

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FIGURE 3128

MSLDIQSLDIQCEELSDARWAELLPLLQQCQVVRLDDCGLTEARCKDISSALRVNPALAE LNLR SNELGDVG VHC
VLQGLQTPSCKIQKLSLQNCCLTGAGCGVLSSTLRTLPTLQELHLS DNLLGDAGLQLLCEGLLD PQCRLEKLQLE
YCSLSAASCEPLASVLRAPDFKELTVSNNDINEAGVRVLCQGLKDSPCQLEALKLESCGVTSDNCRDLCGIVAS
KASLRELALGSNKLGDVGMAELCPGLLHPSSRLRTLWIWECGITAKGCGDL CRVLRAKESLKELSLAGNELGDEG
ARLLCETLLEPGCQLESLWVKSCSFTAACCSHFSSVLAQNRFLLELQISNNRLEDAGVRELCQGLGQPGSVLRVL
WLADCDVSDSSCSLAATLLANHSLRELDLSNNCLGDAGILQLVESVRQPGCLLEQLVLYDIWSEEMEDRLQAL
EKDKPSLRVIS

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FIGURE 3129

CACCCACCCACCCCTCCCCGCATTGTGGCATCAGTGCTGCTGCTTCCAGGGAGCCTTCTGGCCATCCAAGCCT
CCTCTCCAGGTTCTGCCCCGTGCTGTAGTCCCCAGGCCAGTGCTTGGCAGGTGCTCAGGGAATGTATCCACCAACC
AAGGTTTGGGGTGGCTGTCTCTGCCTGACCACTTCCCCAGGCCCTGGCGGGTACCTGAGCTGTGCTCTCAGGG
CCTCAGGAACCTCCTTCCATATTCAGGGCCTGTGCCTGGGGAGGCTTCAGGGTGTAGCAGCTGTGCCATCCCAG
GCTGACCCACCCAGCTTGCCCTGGTAGCCCCAGCCTCTGGGCTAGTGTGCCGTGGGCGAGGGGATGTGCTGTAGCCT
GGTGACAGTCCCCAACCCAGAGGGGGGCCATGGAAGCTGACACCCCAAGTGGCCGCCCCCTGCTCTGTCTTG
CTTCGGACACTGTGGCCGGGTCCAGGATCCTGGCATCCTGGGAGGTCTCTGGCTTTGTGGGCAGCCTGCCTGGCC
CGCACAGTCTGCCTGTCTGAGGGTGAGACACAGGTCAAGCCCCACAGACCCCTTGCTCCCCCTGCTGGGGCCTCC
AGGCTCACAGACCACCCACCCCTACCCTGTCTTGCCCAAGCAAATGAGAGGCAGGGGCTTCCCGGGCTGCTGCT
GTCCCGCCCTCTGTGGGGCAGGAGGAGGTGCCACAGAGGCTGGGTGGTGATAGCCAGGAGATGGGCTGGCATCT
GCATTACCCAAGCTCTGCTGCCCATGGTGGCCTTCTGGGGTGGGTGATGGTCCCTGCCCCCTGCCCCACCCGT
GATGTCTGCTCCAGAGACAAAGGTGGGGAGGGTGTGAAGAGGAAGTGTTGCCAGGGAGAGGCTGCGGCTCCT
CCTGAAACATCAGCCCTGTGGGTCTGTGTTGACAGAACTCTCCGGCTGTGAAACTGTGAGGGGATTGCGCCAAGAC
GTCCTCTTCCCTCTGCCTCCACCCAGGCCACTCTTCACTCCACCATGAGCCTGGACATCCAGAGCCTGGACAT
CCAGTGTGAGGAGCTGAGCGACGCTAGATGGGCCGAGCTCCTCCCTCTGCTCCAGCAGTGCCAAGTGGTCAGGTA
CGCTTGCTCTCGGGTGGCCTTGGGGTGTGGTGGGGCAGGCTGGCGGGTGGCGGCTCCCTCTGAAGGGTGCATT
GCTCTGGAACGCCTTGTGTTGTGGACATGAAGTATGAATTCTGTGCAGCTACCACGTGCATGAGATGTGATTCTTG
TGTTTCTTTTTGACAATTTAGGAATGTAAAACCCATTCCAGGCTCATGCAGCATGGGCTGAGGTGGGCGGGCCGA
GGTGGGCGGCCACTGGCCAGTGGGTCTCTGGCTCCGGTGTCTCAGCTCCTCTCCCTCCCTTGGAGACACGAGGGC
AGGACACAGCTTGGGTCCCTCCGTGAGCCTCCATGGGGCGCTGCTTGTCCCTGCCAAGCTGGGGGCTGGGAGTC
CTCGGCCCTCGAGGTCTCACAACCCAGCAGCTTCACAAGCAGGACACGAGTGCCCTGGGTGGGCGGCATCTTTT
CTCTTTTTACCTGGTGATTTCAAGTAGTGTCAGGTTTGGCGAGGAGTTACGAGGACCGGACGGGGCTCCCTGGTG
AGGTGGTCTGTGTACCTGCGGACGCTAGCTCTGGCCCAGCACCTCCAGGCAGGGTCTGCTTTCCGCCCTGCCC
TTTTCGTCTTCTCACTGGTCCAGGATTGCGTGGCCCTCAGCCCTCTGTCTCCTTAGCCCTCTCCCGTCTGTGAC
TGTCCCTCGTCTCTCTGGGTTCTTGGTGGTCTGAGGGTCTGGCCAGGCTCCTGCAGGACGTCTCTGTGGGGC
TTGTCTGGTGGTTTCTTGTGGTTGAAGTCCTACAGTTTTGGCAGGAATGCAGGGAGATGCCGTGGGGCTGCCAG
GAGCGTCTGTACAGGCGCCGTCTGCCACCTCTCCACTGTGACGCCACTGCCCTTCTCCTGTGACTGATCAG
TGCCCTCGAGAGATACTTTAAATTCTTTTTATTTTTAGAGACAGGGCATTGCTCTGTACCCAGGCTGGAGTGGC
TCCCTCATGGCTTATGCGGCCTCAACCTCCTGGGCTCAAGTGATCCTCCTGCCTCAGCCTCCCGAGTAGCTGGGA
TTATGGGCATGCGCCACCACGCCCCGGCTACTTTTGTATTTTTAGTAAAGACGGGGTTTCTCCATGTTGGTCAGGT
TGGTCTTGAACCTCCCGACCTCAGGTGATCTGCCTGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCA
CCGCGCCTGGCC

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FIGURE 3130

MSLDIQSLHIQCDDLTDARWAELLLLLHNCQVDRDLDDCGLTEARCKDISSALRVNPALAE LNLSNELGDVG VHC
VLQGLQTPSCKIQKLSLQNCCLTGAGCGVLSSTLR TLPTLQELHLS DNLLGDAGLQLLCEGLLD PQCRLEKLQLE
YCSLSAASCEPLASVLR AKPDFKELTVSNNDINEAGVRVLCQGLKD SPCQLEALKLESCGVTS DNCRDLCGIVAS
KASLRELALGSNKLACTTFTGLRRWRTGCRPWRTSH P

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FIGURE 3131A

AGAGTGAAGCCACCACTCGCTCTCGAATCGCGGGACGCTGGGCCTGCGCAGGCCTGTTACAGCAGCTGCATCC
CGTCAGTGTGTAAGCCAGTGGAGCCCTCTTTGGGGCTGCTGAGAGCGGATATTGGAGCTGCCTCTCTGTCTCTGT
TTGGAGATCCTTATGAGCTGGATCCCTTCGACAGCAGTGAAGAGCTTTCTGCAAACCTCTTTCCCTCTGAGTG
CCAAGAGACGGGCTCTGTCCCGGTGAGCCCTGCAGTCCACCAGCCCGTGGCCAGGCCCGTCTCCGTGGGGCTTT
CCAGGAGGCGCTCCCTGCCCGGTGCCAGAGCCAGACTTGGAGGAGGAGCCAGTGCCTGACCTGCTGGGCAGCA
TCCTGTCCGGGCCAGAGCTCCTGATGCTGGGCAGCAGTGTATCATCATCCACCAGCAGCGCTCCCTCAGCGCCA
AGAGGGCGGCTCCAGTTTCTTTTCAGCGAACTCAGGCAGTCTGTCCAGAGGGGAAGAAGGATTCAAGGGCTGCC
TGCAGCCCCGAGCACTGCCCTCCGGGAGCCCGGCCAAGGCCCGTCAGGAAACAGGCCACAGAGCACAGGGCTCA
GCTGTCAAGGCAGGTCCCGCACCCCCGCCCCGACCGCGGGGGCGCTGTGAGGCTGGACTTGCCAGCAGCCCTG
GGGCGGTTTCAAGGCTCGGAACTTGTCAAATGGGAGTGTGCTTGGCTTCAGACAGAGCCACAGCCCTGGTTCAACG
GCACCAACAAGCACACCTTGCCCTTGCTCTGCCGCTCTAAGATCTCAAGCAGAGATTCTAAGCCCCATGTC
GCAGTGTGGTGCCGGGGCTCCCTGAAGCCAGCGCCAGAGAAGAACAGACATCTCTGAGCTACCCAGGATACCAA
AGATCAGGAGAGATGACGGTGGTGGCAGACGGGATGCGGCCCGGCCACGGGCAGAGCATTGAGATCCCAAGTG
CCTGCATCAGCCGACTGACTGGCAGGGAGGGCACCGGGCAGCCAGGGCGAGGCACACGGGCAGAGAGCGAGGCCA
GCAGCAGGGTGCCCCGGGAGCCCGGGGTGCACACGGGCAGCTCCCGGCCCCAGCCCCAGCTCCCATGGCAGTT
TGGCCCCACTGGGACCATCAAGAGGGAAGGGGTGCGGTGACCTTTGAGAGCTTCCGGATCAATATTCCTGGAA
ACATGGCACATTCCAGCCAGCTCTCCAGCCCTGGCTTCTGTAACACGTTCCGGCCTGTGGACGATAAGGAGCAGA
GGAAGGAGAACCCTCACCCCTCTTCTCCATCAAGAAGACGAAGCAGCTGCGGAGCGAGGTCTACGACCCATCCG
ACCCACCGGCTCCGACTCCAGCGCCCTGGCAGCAGCCCCGAGAGGTCTGGCCCCGGCTCCTGCCCTCTGAGA
TCACACGAACCATCTCCATCAACAGCCCGAAGGCCAGACGGTGCAGGCTGTGCGCTGCGTCACCTCCTACACGG
TGGAGAGCATCTTTGGTACAGAGCCCCGAACCCCTCTCGGACCGTCTCCGCCATGTCCAAGCTCCGGGGTGCAG
TGCTGCCGAGGGGGCTCTGACACGGAGCGAGAGGAGCCACAGAGAGCCAGGGCCTGGCTGCCCGGCTGCCGA
GGCCATCCCCCCCCAGAGCCCTGGGATGAGGAGGATGGGGCGTCTTGCAGCACCTTCTTTGGCTCTGAGGAGCGGA
CGGTGACCTGTGTGACTGTGCTGGAGCCGGAAGCCCCACCCAGCCCGGACGTGCTGCAGGCTGCCACCCACAGAG
TCGTGGAGCTCAGGCCCCCTTCCCGGTCCCGCTCCACATCCAGCTCCCGCAGCAGGAAGAAGGCCAAGAGGAAGA
GGGTGTCCAGGGAGCACGGACGGACGCGCTCTGGGACGCGCTCTGAATCCAGGGACAGGAGCTCGAGGTACGCGT
CACCATCAGTGGGTGAGGAGCGCCCCAGGAGGCAGCGGTCCAAGGCCAAGAGCCGGCGGTCTCCAGTGACCGCT
CCAGCAGCCGAGAGCGAGCTAAGAGGAAGAAAGCCAAGGACAAGAGCAGGGAGCACAGGCGGGGGCCCTGGGGCC
ACAGCCGGAGGACGTCCCGGTGCGGGTGGGGAGCCCTGGCAGCTCTTCTATGAGCACTATGAGAGTAGGAAGA
AGAAGAAAAGGAGATCAGCGTCCAGACCTCGGGGAAGGGAGTGCTCCCCCACCAGCAGCCTGGAGAGGCTCTGCA
GGCACAAGCATCAGCGGGAACGCAGCCACGAGCGGCCAGACAGGAAGGAGAGTGTGGCGTGGCCCCGAGACCGGA
GGAAGCGGAGGTCCCGGTCCCCAAGCTCGGAGCACAGGGCACGGGAGCACAGGCGGCCTCGGTCCCGTGAGAAGT
GGCCGCAGACCCGGTCCCATTTCCCAAGAGAGGAAGGGGGCTGTGAGGGAGGCTTCCCCAGCGCCCCTTGCACAGG
GGGAGCCAGGGCGGGAAGACCTCCCCACAGGTTGCCAGCCTTGGGGGAAGCACATGCTCTCGCCGGAGGTGGCTA
CGGCCGACAAGGCCCCCTGCAGGCTCCCCCTGTCTTGAGGTGGCAGCTGAGTGTGAGCCGGACGACCTGGACC
TGGATTATGGCGACTCCGTGGAGGCCGGACACGTCTTTGATGATTTCTCAAGCGACGCCGTTTTTCATCCAGCTCG
ATGACATGAGCTCGCCACCTTCTCCCGAAAGCACAGACTCTTCCCGGAGCGAGACTTCCCACTGAAGCCTGCGT
TGCCCCCAGCCAGCCTGGCCGTGGCCGCCATCCAGAGGGAGGTGTATTGATGCACGATGAAGACCTTTCGCAGC
CCCCACCCCTGCCAGAGGGCACCCAGGAGCCACATTTGCTCAGGCCGACGCGGTGAGAAGGCTGAGGCACCCA
GTTCCCCGGATGTGGCGCCTGCGGGGAAGGAAGACAGCCCTCTGCGAGTGGGAGGGTACAGGAGGCAGCCCGGC
CTGAGGAGGTGGTTTTCGACAGCCCCCTGCTGCGGTCCAGAGCCCTGGTGAAGCGGGTACCTGGAACCTGCAGG
AGTCCGAGAGCAGCGCCCCCGCCGAGGACAGAGCCCCCGGCACCACTTCACAGGCCACAGAAGCCCCGAGAAG
GAGCCTGGGACATGGAGGATGTGGCCCCACAGGGGTGAGGCAGGTGTTCTCCGAGCTGCCCTTTCAGTCAAG
TGCTTCCGGAACCCGGTTCCAGACACAGACCCCTCTCAGGTTTACAGCCCCGCTGCCGCTGCCCGGGCCC
AGCCCTCAAGCATCCACCTGCGCACTGGTCAGCCAGCCACGGTCCAGTTCATCTTCAGGGGAGCCTGCCGC
TAGTGGGCTGTGGGGCAGCACAGACCTGGCCCCAGTGGCCGCTGCCCTGACCCAGCCTCAGAGCCAGCCAGTC
AAGCCACTGCAGCCAGCAACTCGGAGGAGAAGACCCCGCCCCAGGCTAGCTGCGGAGAAAACCAAGAAGGAGG
AGTACATGAAGAAGCTGCACATGCAGGAGCGTGCTGTGGAGGAGGTGAAGCTGGCCATCAAGCCCTTCTACCAGA

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FIGURE 3131B

AGAGGGAGGTGACCAAGGAGGAGTACAAGGACATCCTGCGCAAGGCCGTGCAGAAGATCTGCCACAGCAAGAGTG
GAGAGATCAACCCCGTGAAGGTGGCCAACCTGGTGAAGGCGTACGTGGACAAGTACAGGCACATGCGCAGGCACA
AGAAACCAGAGGCCGGGGAGGAGCCGCCACGCAGGGGGCCGAGGGCTGAGGCCAGGCAATCACGGGCTATGCCC
GGGGAGCTGTCGGGAGTGGCGGGAATCGGGGCCATGCCCGGGGAGCTGTCGGGAGTGGCGGGAATCGGGGCCATG
CCCGGGGAGCTGTCGGGAGTGGCGGGAATGGGGGGCATCACCATGCCCTGCCGTCGGGTTCTGCGCTGACACCT
GGTCTGTGCACCTGTGTTGCTCACAGTTGAAAAGTGGACACTTTTGTATGTATATTATAGAGACACTGTTTCCAT
TCTAATTTATCAAAAATGGATTATCTTTAGAAACCTCTTGATTGACTTACTACTTGGAAGATAAAGCACTTGGTG
ATCAAGAGGGGCTCCTGGTGGGGTGGCGCGTCCTTGATAAATCTCTAGGTGGCCTCCCGCCAACAGCTGCTGTGT
ACCTTTGGCTCTGAATTAGGAATATCTTTACTTTCTCTTTTCC

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FIGURE 3132

MDDDSLDELVARSPGPDGHPQVGPADPAGDFEESSVGSSGDSGDDSDSEHGDGTDGEDEGASEEEDLEDRSGSED
SEDDGETLLEVAGTQGGKLEAAGSFNSDDDAESCPICLNAFRDQAVGTPENCAHYFCLDCIVEWSKNANSCPVDRIT
LFKCICIRAQFGGKILRKIPVENTKASEEEDPTFCEVCGRSDREDRLLLCDGCDAGYHMECLDPPLQEVFVDEW
FCPECAAPGVVLAADAGPVSEEEVSLLLADVPTTSRLRPRAGRTRAIARTRQSERVRATVNRNRI STARRVQHT
PGRLGSSLLDEAIEAVATGLSTAVYQRPLTPRTPARRKRKTRRRKKVPGRKKTPSGPSAKSKSSATRSKKRQHRV
KKRRGKKVKSEATTRSRIARTLGLRRPVHSSCIPSVLKPVEPSLGLLRADIGAASLSLFGDPYELDPFDSSEELS
ANPLSPLSAKRRALSRSALQSHQPVARPVSVGLSRRRLPAAVPEPDLEEEPVPDLLGSILSGQSLMLGSSDVI I
HRDGSLSAKRAAPVSFQRNSGSLSRGEEGFKGCLQPRALPSGSPAQGP SGNRPQSTGLSCQGRSRTPARTAGAPV
RLDLPAAPGAVQARNLSNGSVPGFRQSHSPWFNGTNKHTLPLASAASKISSRDSKPPCRSVVPGPPLKPAPRRTD
ISELPRIPKIRRDDGGGRRDAAPAHGQSIEIPSACISRLTGREGTGQPGRGTRAESEASSRVPREPGVHTGSSRP
PAPSSHGSLAPLGP SRGKGVGSTFESFRINIPGNMAHSSQLSSPGFCNTFRPVDDKEQRKENP SPLFSIKKTKQL
RSEVYDPSDPTGSDSSAPGSSPERSGPGLLPSEITRTISIKQPEGPDGAGCALRHAPTLVESIFGTEPEPPLGPS
SAMSKLRGAVAAEGASDTEREPTESQGLAARLRRPSPPEPWDEEDGASCSTFFGSEERTVTCVTVVEPEAPPSP
DVLQAATHRVVELRPPSRSRSTSSSRSRKKAKRKRV SREHGRTRSGTRSESRDRSSRSASP SVGEERPRRQRKA
KSRRSSDRSSSRERAKRKKAKDKSREHRRGPWGH SRRTSRSRSGSPGSSSYEHYESRKKKKRRSASRPRGRECS
PTSSLERLCRHHKHQRERSHERPDRKESVAWPRDRRKRRSRSPSSEHRAREHRRPRSREKWPQTRSHSPERKGAVR
EASPAPLAQGE PGREDLPTRLPALGEAHVSPEVATADKAPLQAPPVLEVAACEPDDDLDDYGD SVEAGHVFDFF
SSDAVFIQLDDMSSPPSPFESTDSSPERDFPLKPALPPASLAVAAIQREVSLMHDEDPSQPPPLPEGTQEPHLLRP
DAAEKAEPSSPDVAPAGKEDSPSASGRVQEAARPEEVVSQTPLLRSRALVKRV TWNLQESSE SAPAEDRAPRAP
LHRPQKPREGAWDMEDVAPTGV RQAF SELPFP SHVLPEPGFPDTPDPSQVYSPGLPPAPAQPSI PPCALVSQPTV
QFILQGSILPLVGCGAAQTLAPVPAALTPASEPASQATAASNSEKTPAPRLAAEKT KKEEYMKKLHMQERAVEEV
KLAIKPFYQKREVTKEEYKDILRKAVQKICHSKSGEINPVKVANLVKAYVNKYRHMR RHKKPEAGEEPPTQGAEG

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[illegible]

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FIGURE 3134

MQPSSLLPLALCLLAAPASALVRIPLHKFTSIRRTMSEVGGSVEDLIAKGPVSKYSQAVPAVTEGPIPEVLKNYM
DAQYYGEIGIGTPPQCFTVVFDTGSSNLWVPSIHCKLLDIACWIHHKYNSDKSSSTYVKNGTSFDIHYGSGSLSGY
LSQDTVSVPCQSASSASALGGVKVERQVFGEATKQPGITFIAAKFDGILGMAYPRISVNNVLPVFDNLMQQKLVD
QNIFSFYLSRDPDAQPGGELMLGGTDSKYYKGSLSYLNVTRKAYWQVHLDQVEVASGLTLCKEGCEAIVDTGTSL
MVGPVDEVRELQKAIGAVPLIQGEYMIPCEKVSTLPAILTLKLGGKGYKLSPEDYTLKVSQAGKTLCLSGFMGMDI
PPPSGPLWILGDVFIGRYYTVFDRDNNRVGFAEAARL

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FIGURE 3135

GCGCGCAACGGCGGGCGACGGCGGGCGACCCACCGCACATCCTGCCAGGCCTCCGGCGCCCAGGGCGCACGGCGCG
CCCCCGTGCCGGCGGGCCCTGCGCCCATTTCTTGCGGCCCCCGCCGGTCGGCCCCGAGGCCCTTTGCCGGCC
ACCAGCCAGGCCCCGCGCCGGCCCGCCGCCAGGACCGGCCCCGCGCCCCGAGGCCGCCCGCCGCCCGCGC
CGCCATGGGAGTGGAGGGCTGCACCAAGTGCATCAAGTACCTGCTCTTCGTCTTCAATTTTCGTCTTCTGGCTGGC
TGGAGGCGTGATCCTGGGTGTGGCCCTGTGGCTCCGCCATGACCCGCGAGACCACCAACCTCCTGTATCTGGAGCT
GGGAGACAAGCCCGCGCCCAACACCTTCTATGTAGGCATCTACATCCTCATCGCTGTGGGCGCTGTCATGATGTT
CGTTGGCTTCCCTGGGCTGCTACGGGGCCATCCAGGAATCCCAGTGCCTGCTGGGGACGTTCTTACCTGCCTGGT
CATCCTGTTTGCCTGTGAGGTGGCCGCCGGCATCTGGGGCTTTGTCAACAAGGACCAGATCGCCAAGGATGTGAA
GCAGTTCTATGACCAGGCCCTACAGCAGGCCGTGGTGGATGATGACGCCAACAACGCCAAGGCTGTGGTGAAGAC
CTTCCACGAGACGCTTGACTGCTGTGGCTCCAGCACACTGACTGCTTTGACCACCTCAGTGCTCAAGAACAATTT
GTGTCCCTCGGGCAGCAACATCATCAGCAACCTCTTCAAGGAGGACTGCCACCAGAAGATCGATGACCTCTTCTC
CGGGAAGCTGTACCTCATCGGCATTGCTGCCATCGTGGTCGCTGTGATCATGATCTTCGAGATGATCCTGAGCAT
GGTGCTGTGCTGTGGCATCCGGAACAGCTCCGTGTACTGAGGCCCCGCGAGCTCTGGCCACAGGGACCTCTGCAGT
GCCCCCTAAGTGACCCGGACACTTCCGAGGGGGCCATCACCGCCTGTGTATATAACGTTTCCGGTATTACTCTGC
TACACGTAGCCTTTTTACTTTTGGGGTTTTGTTTTTGTCTGAACTTTCTGTTACCTTTTTCAGGGCTGACGTCA
CATGTAGGTGGCGTGTATGAGTGGAGACGGGCCTGGGTCTTGGGGACTGGAGGGCAGGGGTCTTCTGCCCTGGG
GTCCCAGGGTGCTCTGCCTGCTCAGCCAGGCCTCTCCTGGGAGCCACTCGCCCAGAGACTCAGCTTGGCCAACTT
GGGGGGCTGTGTCCACCCAGCCCGCCCGTCTGTGGGCTGCACAGCTCACCTTGTTCCTCCTGCCCCGGTTTGA
GAGCCGAGTCTGTGGGCACTCTCTGCCTTCATGCACCTGTCTTTCTAACACGTCGCCTTCAACTGTAATCACAA
CATCCTGACTCCGTCATTTAATAAAGAAGGAACATCAGGCATGCT

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FIGURE 3136

CTTGCTCGCGGAGAGAGGAGCTAGGAGCCTCGGCCAATGGGAGCCGGCGTTGTTGGAGGCCACGGCGGCGCAGCC
CCAAAGCGAGCGAAGCTAGGGTCGCCGCCACTGCCGCAGGAGGCGTGAGGGGATAAAAACATTCAGATGGCAGAT
CACAGTTTTTTCAGATGGGGTTCCTTCAGATTCCGTGGAAGCTGCTAAAAATGCAAGTAACACAGAAAAGCTCACA
GATCAGGTGATGCAGAATCCTCGAGTTCTGGCAGCTTTACAGGAGCGACTTGACAATGTCCCTCACACCCCTTCC
AGCTACATCGAAACTTTACCTAAAGCAGTAAAAAGAAGTAATTAATGCATTGAAACAACCTTCAGGTGAGATGTGCT
CACATAGAAGCCAAGTTCTATGAAGAGGTACATGACTTGGAAAGAAAGTATGCAGCGCTATACCAGCCTCTCTTT
GACAAGAGAAGAGAATTTATCACC GGCGATGTTGAACCAACAGATGCGGAATCGGAATGGCACAGTGAAAATGAA
GAGGAAGAGAAATTGGCTGGAGACATGAAAAGTAAAGTAGTCGTACAGAAAAAGCAGCGGCAACGGCTGAAGAG
CCAGATCCCAAAGGAATTCAGAGTTCTGGTTTACCATCTTCAGAAATGTGGACATGCTGAGTGAATTAGTCCAG
GAATATGATGAACCAATCTTGAAACACCTGCAGGATATTAAAGTGAAATTTCTGACCCCTGGACAGCCTATGTCT
TTTGTGTTAGAGTTCCACTTTGAACCAACGACTACTTTACCAACTCAGTCTGACAAAAACCTACAAGATGAAA
TCAGAACCAGATAAGGCTGATCCCTTTTCCTTTGAAGGTCCTGAGATTGTGGACTGTGACGGGTGTACTATTGAC
TGGAAGAAAGGAAAGAATGTTACTGTCAAACCATCAAGAAAAAGCAGAAGCATAAGGGTCGAGGCACTGTTAGA
ACAATTACGAAACAAGTACCCAATGAGTCCTTTTCAACTTCTTCAATCCATTGAAAGCATCCGGGGATGGAGAA
TCACTGGATGAAGATTCTGAATTACATTAGCCTCTGATTTTGAATTTGGACACTTTTTCCGTGAGCGGATAGTC
CCGCGGGCTGTGCTGTACTTCACTGGGGAGGCCATAGAAGATGATGACAAATTTGAAGAAGGTGAAGAAGGAGAA
GAGGAGGAATTAGAAGGTGACGAGGAGGGAGAAGACGAGGATGATGCGGAAATTAACCCCAAGGTGTAATTTTTG
TCTGTTAATCATTCATACGTTTCTAGAAGGAACCCAGCCAGCCGGCGGAATGCAAGCAGCAGTAGGAAGCGGAGG
CGGGTGCCTGGCAGACCGGCTGTGCGGACTCCAGGCCTGTGGGCGGGGCCTCGGTCTTGCCGACGACAATCCC
GTGGACAGAGCTTACTCCATCTAACTCGTTTTCAAGTGCATGATTTTCACTTTCACTTTTCTTTTTCTTTATTA
TTTTGCTTAACTTGTACAGTGGCAACTGAAATGCATTTAGAAAATAGGAGGTTTCGTCCAGCACCCCTCTGCAGCC
TTGGTGCCTGTAGCTCTGGACTTCCCTGGGCCTTCCCTGTGGGAGGGCCCTGTAGACCACATCAGGGTGGGGTG
GGGGTCACTTGGCAAAAAGGGCCGAGGTCTGGTGATGTGGTTCCAGGATCTGGAACCTCTCCACCCCTCTGTC
AGTTGGACTGAATTCTTCCCTTTTCATCCGAAGAAACCCACTTGCTGTTTCCAGCCGCTGAATCTGCTGAGTGTGC
AGCCTGCATCACCTGCTGTATGCCGATCATCTCAGAAAGGGCTGTGTAGAGTAGGGCCCTGTTCTCTTAGGATG
TTGCTTCTTCATTTTTTTTTTTTTTTTGGGGTGGGTGAGGTTGTGACACACCAGCCAGGTGAGAGCTGCTGCG
GGTCACCTCATATTTATTTATCCCTTCTTGCTGTGAGGACTGCGGCTTTTCGCTGTGGCTCGTCTTAACGTTT
CTGAACCACCTTGGTGCCCTGAGCAGGAAGATGTGCCACTTCTAGCAGGCGCAAGGCCTGTGCGGAAGAAACGC
CGCTCCCTGCCACCAGGGCTGAAGATGCGAGCCCGTCTCATGACGAGGCGCCACCCTGCTGCCGAGCCGGGC
TTCGGCAGTCTTCTCCACTGAGGGACTGGGCTGGGAAGTCTGCGTTTCAGTGGAGCGTATGAGCGTCAAGTCCT
GCTTTCTCAGTAGCCCCATTGCGGGGGCCCCACCATTATCCTGTCTGAAGGTCCTGGGTTTGGTGTGACCGCTTG
GCGGCTGGTGGGTGGGGTTTTCAAGTGGGTGACGGCGCTCTCCGGCAGCCGGGGATGGCCGTGTCCGCACTGACC
AGGCCTGTGGAGAGTGTGCGGCTAACCTTAGAACACATTTGTAAGTGAATACAGTGTTCATTTGTACAGAA
TAGTTAGAATATTCTATTAAAGTGGTGAAACATTG

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FIGURE 3137

CCGGGGCGGCGGTTGCATCAGATTCTAGGAAGTGTCTGTAGCCGCAGCTGCGGGTCCGGGATTCCCAGCCATGGC
AGATTCTCCGGGCAGCAGGGCAAAGCCGGCGTGTGCAGCCCCAGTGGTCCCCTCCTGCTGGGACCCAGCCATG
CAGACTCCACCTTTACAACAGCCTCACCAGGAACAAGGAAGTGTTCATACCTCAAGATGGGAAAAAGGTGACGTG
GTATTGCTGTGGGCCAACCGTCTATGACGCATCTCACATGGGGCAGCCAGGTCTACATCTCTTTTGATATCTT
GAGAAGAGTGTGAAGGATTACTTCAAATTTGATGTCTTTTATTGCATGAACATTACGGATATTGATGACAAGAT
CATCAAGAGGGCCCGGCAGAACCACCTGTTTCGAGCAGTATCGGGAGAAGAGGCCTGAAGCGGCACAGCTCTTGGA
GGATGTTTCAAGCCCGCTGAAGCCATTTTCAGTAAAATTAAATGAGACCACGGATCCCGATAAAAAGCAGATGCT
CGAACGGATTACAGCAGCAGTGCAGCTTGCCACAGAGCCACTTGAGAAAGCTGTGCAGTCCAGACTCACGGGAGA
GGAAGTCAACAGCTGTGTGGAGGTGTTGCTGGAAGAAGCCAAGGATTTGCTCTCTGACTGGCTGGATTCTACACT
TGGCTGTGATGTCACTGACAATTCCATCTTCTCCAAGCTGCCCAAGTTCTGGGAGGGGGACTTCCACAGAGACAT
GGAAGCTCTGAATGTTCTCCCTCCAGATGTCTTAACCCGGGTTAGTGAGTATGTGCCAGAAATTGTGAACTTTGT
CCAGAAGATTGTGGAACAACGGTTACGGCTATGTCTCCAATGGGTCTGTCTACTTTGATACAGCGAAGTTTGCTTC
TAGCGAGAAGCACTCCTATGGGAAGCTGGTGCCTGAGGCCGTTGGAGATCAGAAAGCCCTTCAAGAAGGGGAAGG
TGACCTGAGCATCTCTGCAGACCGCCTGAGTGAGAAGCGCTCTCCAACGACTTTGCCTTATGGAAGGCCTCTAA
GCCCCGGAGAACCGTCTGCGCCGTGCCCTTGGGGAAAGGGTCGTCCGGGCTGGCATAATCGAGTGTCTCGGCCATGGC
AGGCACCCCTCCTAGGGGCTTCGATGGACATTACGGAGGTGGGTTCGACCTCCGGTTCCCCACCATTGACAATGA
GCTGGCAGAGTCGGAGGCCTACTTTGAAAACGACTGCTGGGTGAGGTACTTCCCTGCACACAGGCCACCTGACCAT
TGCAGGCTGCAAAATGTCAAAGTCACTAAAAAATTCATCACCATTAAAGATGCCTTGAAAAAGCACTCAGCACG
GCAGTTGCGGCTGGCCTTCTCATGCACTCGTGGAAGGACACCCTGGACTACTCCAGCAACACCATTGGAGTCAGC
GCTTCAATATGAGAAGTTCTTGAATGAGTTTTTCTTAAATGTGAAAGATATCCTTCGCGCTCCTGTTGACATCAC
TGGTCAGTTTGAGAAGTGGGGAGAAGAAGAAGCAGAACTGAATAAGAACTTTTATGACAAGAAGACAGCAATTCA
CAAAGCCCTCTGTGACAATGTTGACACCCGCACCGTCATGGAAGAGATGCGGGCCTTGGTCAGTCAGTGCAACCT
CTATATGGCAGCCCGGAAAGCCGTGAGGAAGAGGCCCAACCAGGCTCTGCTGGAGAACATCGCCCTGTACCTCAC
CCATATGCTGAAGATCTTTGGGGCCGTAGAAGAGGACAGCTCCCTGGGATTCCCGGTCGGAGGGCCTGGAACCAG
CCTCAGTCTCGAGGCCACAGTCATGCCCTACCTTCAGGTGTTATCAGAATTCGAGAAAGGAGTGCAGGAAGATTGC
CCGAGAGCAAAAAGTCCCTGAGATTCTGCAGCTCAGCGATGCCCTGCGGGACAACATCCTGCCTGAGCTTGGGGT
GCGGTTTGAAGACCACGAAGGACTGCCCACAGTGGTGAACTGGTAGACAGAAACACCTTATTTAAAGAGAGAGA
AGAAAAGAGACGGGTTGAAGAGGAGAAAGAGGAAGAAGAAAGAGGAGGCGGCCCGGAGGAAACAGGAACAAGAAGC
AGCAAAGCTGGCCAAGATGAAGATTCCCCCAGTGAGATGTTCTTGTGAGAAACCGACAAATACTCCAAGTTTGA
TGAAAATGGTCTGCCCACACATGACATGGAGGGCAAAGAGCTCAGCAAAGGGCAAGCCAAGAAGCTGAAGAAGCT
CTTCGAGGCTCAGGAGAAGCTCTACAAGGAATATCTGCAGATGGCCCAGAATGGAAGCTTCCAGTGGAGGGGGCAC
AGGACTGACTTTTTAAACCATTGTGGACTAGTGGCTGCTGTCTGCCTCAGTGACAATGTCCAGCGCTCCTATCA
TGTTTACAGTCACCCTTGGGTCTAAATTAAGAGTTGTGTTTCATGTAGGTTTCGTGTCGTCGTTGGCTCTGAGACA
TTGATAATAAATTTTTCTCAACAGTGAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3138

MADSSGQQGKRRVQPQWSPPAGTQPCRLHLYNSLTRNKEVFIPQDGKKVTWYCCGPTVYDASHMGHARSYISFD
ILRRVLKDYFKFDVFYCMNITDIDDKIIKRARQNLHFEQYREKRPEAAQLLEDVQAALKPFSVKLNETTDPDKKQ
MLERIQHAVQLATEPLEKAVQSRLTGEEVNSCVEVLLEEAKDLLSDWLDSTLGCDVTDNSIFSKLPKFWEGDFHR
DMEALNVLPPDVLTRVSEYVPEIVNFVQKIVDNGYGYVSNQSVYFDTAKFASSEKHSYKLVPEAVGDQKALQEG
EGDLSISADRLSEKRSPNDFALWKASKPGEPSPWPCPWGKGRPGWHIECSAMAGTLLGASMDIHGGGFDLRFPHHD
NELAQSEAYFENDCWVRYFLHTGHLTIAGCKMSKSLKNFITIKDALKKHSARQLRLAFLMHSWKDTLDYSSNTME
SALQYEKFLNEFFLNVDILRAPVDITGQFEKWGEEEEAEKNKFYDKKTAIHKALCDNVDTRTVMEEMRALVSQC
NLYMAARKAVRKRPNQALLENIALYLTHMLKIFGAVEEDSSLGFPVGGPGTSLSLEATVMPYLQVLSEFREGVRK
IAREQKVPEILQLSDALRDNILPELGVRFEDEGLPTVVKLVDRNTLLKEREKRRVEEEKRKKKEEAARRKQEQ
EAAKLAKMKIPPSEMFLSETDKYSKFDENGLPTHMEGKELSKGQAKKLKLFQAQEKLYKEYLQMAQNGSFQ

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FIGURE 3139

ATGTCCATCAGGGTAACCCAGAAGTCCTACGAGGTGTCCACCTCTAGCCCCCAGGACTTCAGCAGCCGCTCCTA
CACGAGTGGACCTGGTGCCTGCATCAGCTCCTCAAGCTTTTCCCCAGTGGTACCAGCAGCTTCCGGGGTAGCCTG
GGTGGAGGTTATGACAAGGTACGGTTCCTGGAGCAGCATAACAAGATGCTGGAGACCAAGTGGAGCCTCCTGCAG
CAGCAGAAGACAGCTCGGAGCAACATGGACAACATGTTTCGAGAGCTACATCAACAACCTTAGGCGGCAACTGGAC
ACTCTGGGCCAGGAGAAGCTGAAGCTTGGCAACATGCAAGGGCTGATGGAGAAGTCAAGAACAAGTATGAGGAT
GAGATCAATAAGTGTGCAGAGCTGGAGAATGAATTTGTCCTCATCAAGAAGGATGTGGATGAAGCTAACATGAAC
AAGGTAGAGCTGGAGTCTCTCCTGGAAGGGCTGACTGACGAGATCAACTTCCTCAGGCAGCTGTATGAAGAGGAG
ATCCCAGAGCTGCAGTCCCAGATTTTCGGACACATCTGTGGTGCTGTCCATGGACAGCAGCCGCTCCCTGGACATG
GACAACACTATCGCTGAGGTCAAGGCGCAGTACAAGGTGATCTCCAACCGCAGCCGGGCGGAGGCTGAGAGCATG
CACCAGATCAACTCCTTCAGCCACACCAGCTCCACCAGGGCCGTGGTTGTGAAGAATATCGAGACCCACGAAGGG
AAGCTGGTGTCCGAGTCCTCTGACGTCCTGCCCAAGTGA

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FIGURE 3140

MSIRVTQKSYEVSTSSPPGLQQPLLHEWTWCLHQLLKLFPSTSSFRGSLGGGYDKVRFLEQHNKMLETKWSLLQ
QQKTARSNMDNMFESYINNLRRLDTLGQEKLLGNMQGLMENCKNKYEDEINKCAELENEFVLIKKDVDEANMN
KVELESLLLEGLTDEINFLRQLYEEIPELQSQISDTSVVLSDSSRSLDMDNTIAEVKAQYKLHGYQELMKVKLA
LDIEIATYRKLLDGEESRLDSFSHTSSTRVVVKNIETHEGKLVSESSDVLPK

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FIGURE 3141

GGGAAGGGGATTTGGATTGTTGCGCCTCTGCTCTGAAGAAAGTGCTGTCTGGCTCCAACTCCAGTTCTTTCCCCT
GAGCAGCGCCTGGAACCTAACCTTTCCCACTCTGTACCTTTCTCGATCCCGCCGGCGCTTTAGAGCCGCGAGTCCA
GTCTTGGATCCTTCAGAGCCTTAGCCACTAGCTGCGATGCATGTGATCAAGCGAGATGGCCGCCAAGAACGAGTC
ATGTTTGACAAAATTACATCTCGAATCCAGAAGCTTTGTTATGGACTCAATATGGATTTTGTGATCCTGCTCAG
ATCACCATGAAAGTAATCCAAGGCTTGACAGTGGGGTCACCACAGTGGAAGTACATACTTTGGCTGCTGAAACA
GCTGCAACCTTGACTACTAAGCACCTGACTATGCTATCCTGGCAGCCAGGATCGCTGTCTCTAAGTTGCACAAA
GAAACAAAAGAAAGTGTTCAAGTATGTGATGGAAGACCTCTATACTACATAAATCCACATAATGGCAAACACTCT
CCCATGGTGGCCAAGTCAACATTGGATATTGTTCTGGCCAATAAAGATCGCCTGAATTCTGCTATTATCTATGAC
CGAGATTTCTCTTACAATTACTTCGGCTTTAAGACGCTAGAGCGGTCTTATTTGTTGAAGATCAATGGAAAAGTG
GCTGAAAGACCACAACATATGTTGATGAGAGTATCTGTTGGGATCCACAAAGAAGACATTGATGCAGCAATTGAA
ACATATAATCTTTCTTCTGAGAGGTGGTTTACTCATGCTTCGCCCACTCTCTTCAATGCTGGTACCAACCGCCCA
CACTTTCTAGCTGTTTTCTTCTGAGTATGAAAGATGACAGCATTGAAGGCATTTATGACACTCTAAAGCAATGT
GCATTGATTTCTAAGTCTGCTGGAGGAATTGGTGTGCTGTGAGTTGTATTCTGGGCTACTGGCAGCTACATTGCT
GGGACTAATGGCAATTCCAATGGCCTTGACCGATGCTGAGAGTATATAACAACACAGCTCGATATGTGGATCAA
GGTGGGAACAAGCGTCTGGGGCATTGCTATTTACCTGGAGCCTTGGCATTAGACATCTTTGAATTCCTTGAT
TTAAAGAAGAACACAGGAAAGGAAGAGCAGCGTGCCAGAGATCTTTCTTTGCTCTTTGGATTCCGGATCTCTTC
ATGAAACGAGTGGAGACTAATCAGGACTGGTCTTTGATGTGTCCAATGAGTGTCTGGTCTGGATGAGGTTTGG
GGAGAGGAATTTGAGAACTATATGCAAGTTATGAGAAACAAGGTCGTGTCCGCAAAGTTGTAAAAGCTCAGCAG
CTTTGGTATGCCATCATTGAGTCTCAGACGGAACAGGCACCCCGTATATGCTCTACAAAGATTCTGTAAATCGA
AAGAGCAACCAGCAGAACCTGGGAACCATCAAATGCAGCAACCTGTGCACAGAAATAGTGGAGTACACCAGCAAA
GATGAGGTTGCTGTTTGTAAATTTGGCTTCCCTGGCCCTGAATATGTATGTCACATCAGAACACACATACGACTTT
AAGAAGTTGGCTGAAGTCACTAAAGTCGTGTGCGAAACTTGAATAAAATTATTGATATAAACTACTATCCTGTA
CCAGAGGCATGCCTATCAAATAAACGCCATCGCCCCATTGGAATTGGGGTACAAGGTCTGGCAGATGCTTTTATC
CTGATGAGATACCCTTTTGAGAGTGCAGAAGCCAGTTACTGAATAAGCAGATCTTTGAAACTATTTATTATGGT
GCTCTGGAAGCCAGCTGTGACCTTGCCAAGGAGCAGGGCCCATACGAAACCTATGAGGGCTCTCCAGTTAGCAAA
GGAATTCCTCAGTATGATATGTGAATGTTACTCTACAGACCTATGGGACTGGAAGGTTCTCAAGGAGAAGATT
GCAAAGTATGGTATAAGAAACAGTTTACTTATTGCCCCGATGCCTACAGCTTCCACTGCTCAGATCCTGGGGAAT
AATGAGTCCATTGAACCTTACACCAGCAACATCTATACTCGCAGAGTCTTGTGAGGAGAATTTAGATTGTAAAT
CCTCACTTATTGAAAGATCTTACCGAGCGGGGCTATGGCATGAAGAGATGAAAAACAGATTATTGCATGCAAT
GGCTCTATTACAGAGCATACCAGAAAATCCTGATGACCTGAAGCAACTTTATAAACTGTGTGGGAAATCTCTCAG
AAAAGTGTCTCAAGATGGCAGCTGAGAGAGGTGCTTTTATTGATCAAAGCCAATCTTTGAACATCCACATTGCT
GAGCCTAACTATGGCAAACCTCACTAGTATGCACTTCTACGGCTGGAAGCAGGGTTTGAAGACTGGGATGTATTAT
TTAAGGACAAGACCAGCGGCTAATCCAATCCAGTTCACTCTAAATAAGGAGAAGCTAAAAGATAAAGAAAAGGTA
TCAAAGAGGAAGAAGAGAAGGAGAGGAACACAGCAGCCATGGTGTGCTCTTTGGAGAATAGAGATGAATGTCTG
ATGTGTGGATCCTGAGGAAAGACTTGGAAGAGACCAGCATGTCTTCAGTAGCCAACTACTTCTTGAGCATAGAT
AGGTATAGTGGGTTTGCTTGAGGTGGTAAGGCTTTGCTGGACCCTGTTGCAGGCAAAAGGAGTAATTGATTTAAA
GTACTGTTAATGATGATAATGATTTTTTTTTTAACTCATATATTGGGATTTTCACCAAAATAATGCTTTTGAAA
AAAAGAAAAAAAACGGATATATTGAGAATCAAAGTAGAAGTTTATAGGAATGCAAAATAAGTCATCTTGATAC
AGGGAGTGGTTAAGTAAGGTTTCATCACCCCTTTAGCACTGCTTTCTGAAGACTTCAGTTTGTAAAGGAGATT
TAGTTTTACTGCTTTGACTGGTGGGTCTCTAGAAGCAAACTGAGTGATAACTCATGAGAAGTACTGATAGGACC
TTTATCTGGATATGGTCTATAGGTTATTCTGAAATAAAGATAAACATTTCTAAGTG

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FIGURE 3142

ACACTCGCTTCTGGAACGTCTGAGATTATCAATAAGCTCCTAGTCCAGACGCCATGGGTCATTTCACAGAGGAGG
ACAAGGCTACTATCACAAGCCTGTGGGGCAAGGTGAATGTGGAAGATGCTGGAGGAGAAACCCTGGGAAGGCTCC
TGGTTGTCTACCCATGGACCCAGAGGTTCTTTGACAGCTTTGGCAACCTGTCTCTGCCTCTGCCATCATGGGCA
ACCCCAAAGTCAAGGCACATGGCAAGAAGGTGCTGACTTCCTTGGGAGATGCCATAAAGCACCTGGATGATCTCA
AGGGCACCTTTGCCAGCTGAGTGAAGTGCAGTGTGACAAGCTGCATGTGGATCCTGAGAACTTCAAGCTCCTGG
GAAATGTGCTGGTGACCGTTTTGGCAATCCATTTTCGGCAAAGAATTACCCCTGAGGTGCAGGCTTCCTGGCAGA
AGATGGTGACTGCAGTGGCCAGTGCCCTGTCTCCAGATACCACCTGAGCCTCTTGCCCATGATTCAGAGCTTTCA
AGGATAGGCTTTATTCTGCAAGCAATACAAATAATAAATCTATTCTGCTGAGAGATCAC

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FIGURE 3143

MGHFTEEDKATITSLWGKVNVEDAGGETLGRLLVVYPWTQRFFDSFGNLSSASAIMGNPKVKAHGKKVLTSLGDA
IKHLDDLKGTFAQLSELHCDKLHVDPENFKLLGNVLVTVLAIHFGKEFTPEVQASWQKMTAVASALSSRYH

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FIGURE 3144

ACACTCGCTTCTGGAACGTCTGAGGTTATCAATAAGCTCCTAGTCCAGACGCCATGGGTCATTTACAGAGGAGG
ACAAGGCTACTATCACAAAGCCTGTGGGGCAAGGTGAATGTGGAAGATGCTGGAGGAGAAACCCCTGGGAAGGCTCC
TGGTTGTCTACCCATGGACCCAGAGGTTCTTTGACAGCTTTGGCAACCTGTCCTCTGCCTCTGCCATCATGGGCA
ACCCCAAAGTCAAGGCACATGGCAAGAAGGTGCTGACTTCCTTGGGAGATGCCATAAAGCACCTGGATGATCTCA
AGGGCACCTTTGCCCAGCTGAGTGAAGTGCAGTGTGACAAGCTGCATGTGGATCCTGAGAACTTCAAGCTCCTGG
GAAATGTGCTGGTGACCGTTTTGGCAATCCATTTCGGCAAAGAATTACCCCTGAGGTGCAGGCTTCCTGGCAGA
AGATGGTGACTGGAGTGGCCAGTGCCCTGTCTCCAGATACCACTGAGCTCACTGCCCCATGATGCAGAGCTTTCA
AGGATAGGCTTTATTCTGCAAGCAATACAAATAATAAATCTATTCTGCTAAGAGATCAC

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FIGURE 3145

MGHFTTEEDKATITISLWGKVNVEDAGGETLGRLLVVYPWTQRFFDSFGNLSSASAIMGNPKVKAHGKKVLTSLGDA
IKHLDDLKGTFAQLSELHCDKLHVDPENFKLLGNVLVTVLAIHFGKEFTPEVQASWQKMVTGVASALSSRYH

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FIGURE 3146

CAACAAAAAAGAGCCTCAGGATCCAGCACACATTATCACAAACTTAGTGTCATCCATCACTGCTGACCCTCTCC
GGACCTGACTCCACCCCTGAGGACACAGGTGAGCCTTGACCAATGACTTTTAAGTACCATGGAGAACAGGGGGCC
AGAACTTCGGCAGTAAAGAATAAAAGGCCAGACAGAGAGGCAGCAGCACATATCTGCTTCCGACACAGCTGCAAT
CACTAGCAAGCTCTCAGGCCTGGCATCATGGTGCAATTTTACTGCTGAGGAGAAGGCTGCCGTCCTAGCCTGTGG
AGCAAGATGAATGTGGAAGAGGCTGGAGGTGAAGCCTTGGGCAGACTCCTCGTTGTTTACCCCTGGACCCAGAGA
TTTTTTGACAGCTTTGGAAACCTGTCGTCTCCCTCTGCCATCCTGGGCAACCCCAAGGTCAAGGCCCATGGCAAG
AAGGTGCTGACTTCCTTTGGAGATGCTATTAAAAACATGGACAACCTCAAGCCCGCCTTTGCTAAGCTGAGTGAG
CTGCACTGTGACAAGCTGCATGTGGATCCTGAGAACTTCAAGCTCCTGGGTAACGTGATGGTGATTATTCTGGCT
ACTCACTTTGGCAAGGAGTTCACCCCTGAAGTGCAGGCTGCCTGGCAGAAGCTGGTGTCTGCTGTGCGCCATTGCC
CTGGCCCATAAGTACCACTGAGTTCTCTTCCAGTTTGAGGTCTTCTGTGACCCTGACACCCCTCCTTCTGCACA
TGGGGACTGGGCTTGGCCTTGAGAGAAAGCCTTCTGTTTAATAAAGTACATTTTCTTCAGTAATC

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FIGURE 3147

MVHFTAEKAAVTSLWSKMNVEEAGGEALGRLLVVYPWTQRFFDSFGNLSSPSAILGNPKVKAHGKKVLTSFGDA
IKNMDNLKPAFAKLSELHCDKLHVDPENFKLLGNVMVILATHFGKEFTPEVQAAWQKLVSAVAIALAHKYH

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FIGURE 3148

CTCTTCTCCCTGATTCAAGACTCCTCTGCTTTGGACTGAAGCACTGCAGGAGTTTGTGACCAAGAACTTCAAGA
GTCAAGACAGAAGGAAGCCAAGGGAGCAGTGCAATGGATTTCTCAGTAAAGGTAGACATAGAGAAGGAGGTGACC
TGCCCCATCTGCCTGGAGCTCCTGACAGAACCTCTGAGCCTAGATTGTGGCCACAGCTTCTGCCAAGCCTGCATC
ACTGCAAAGATCAAGGAGTCAGTGATCATCTCAAGAGGGGAAAGCAGCTGTCCTGTGTGTCAGACCAGATTCCAG
CCTGGGAACCTCCGACCTAATCGGCATCTGGCCAACATAGTTGAGAGAGTCAAAGAGGTCAAGATGAGCCACAG
GAGGGGCAGAAAGAGAGATGTCTGTGAGCACCACGAAAAAACTCCAGATCTTCTGTAAGGAGGATGGAAAAGTC
ATTTGCTGGGTTTGTGAACTGTCTCAGGAACACCAAGGTACCAAACATTCCGCATAAACGAGGTGGTCAAGGAA
TGTCAGGAAAAGCTGCAGGTAGCCCTGCAGAGGCTGATAAAGGAGAATCAAGAGGCTGAGAAGCTGGAAGATGAC
ATCAGACAAGAGAGAACCGCTGGAAGATCGAGAGACAGAAGATTCTGAAAGGGTTCAATGAAATGAGAGTCATC
TTGGACAATGAGGAGCAGAGAGAGCTGCAAAGCTGGAGGAAGGTGAGGTGAATGTGCTGGATAACCTGGCAGCA
GCTACAGACCAGCTGGTCCAGCAGAGGCAGGATGCCAGCAGCTCATCTCAGATCTCCAGCGGAGGTTGACGGGA
TCGTCAGTAGAGATGCTGCAGGATGTGATTGACGTGATGAAAAGGAGTGAAAGCTGGACATTGAAGAAGCCAAAA
TCTGTTTTCCAAGAACTAAAGAGTGTATTCCGAGTACCAGATCTGAGTGGGATGCTGCAAGTTCTTAAAGAGCTG
ACAGATGTCCAGTACTACTGGGTGGACGTGATGCTGAATCCAGGCAGTGCCACTTCGAATGTTGCTATTTCTGTG
GATCAGAGACAAGTGAAACTGTACGCACCTGCACATTTAAGAATTCAAATCCATGTGATTTTTCTGCTTTTGGT
GTCTTCGGCTGCCAATATTTCTCTTCGGGGAAATATTACTGGGAAGTAGATGTGTCTGGAAAGATTGCCTGGATC
CTGGGCGTACACAGTAAATAAGTAGTCTGAATAAAAGGAAGAGCTCTGGGTTTGCTTTTGATCCAAGTGTAAT
TATTCAAAGTTTACTCCAGATATAGACCTCAATATGGCTACTGGGTTATAGGATTACAGAATACATGTGAATAT
AATGCTTTTGAGGACTCCTCCTCTTCTGATCCCAAGGTTTTGACTCTCTTTATGGCTGTGCTCCCTGTCGTATTG
GGGTTTTCTAGACTATGAGGCAGGCATTGTCTCATTTTTCAATGTACAAACCACGGAGCACTCATCTACAAGT
TCTCTGGATGTGCTTTTCTCGACCTGCTTATCCGTATTTCAATCCTTGGAAGTGCCTAGTCCCCATGACTGTGT
GCCCCACGAGCTCCTGAGTGTTCTCATTCTTTACCCACTTCTGCATAGTAGCCCTTGTGCTGAGACTCAGATTC
TGCACCTGAGTTTCACTCTACTGAGACCATCTCTTCTTTCTTTCCCTTCTTTTACTTAGAATGTCTTTGTATT
CATTTGCTAGGGCTTCCATAGCAAAGCATCATAGATTGCTGATTTAACTGTAATTGTATTGCCGTACTGTGGGC
TGGAATCCCAAATCTAGATTCCAGCAGAGTTGGTTCTTTCTGAGGTCTGCAAGGAAGGGCTGTGTTCCATGCCCT
CTCTCCTTGGCTTGTAGAAAGCATCTTGTCCCTATGACTCTTCACATTGTCTTTATGTACATCTCTGTGCCCAG
TTTTCCCTTTTTTATTAAGACACCAGTCATACTGGCTCAGGGCCACCGCTAATGCCTTAATGAAATCATTTTAAC
ATTATATTCTCTACAAAGACCTTATTTCCAAATAAGATAATATTTGGAGGTATTGGGAATAAAACTCCAACATA
TAAATTTGAGGAAGGCACGATTTCACTCATAACAATCTTACCCTTTCTTGCAAGAGATGCTTGTACATAATTTTC
CTAATACCTTGGTTTCACTAGTAGTAAACATTATTATTTTTTTATATTTGCAAAGGAACATATCTAATCCTTC
CTATAGAAAGAACAGTATTGCTGTAATGTCTTTTCTTTTCTTCTCATTCTCCTCTGCCCCCTTAAAGATTGAAG
AAAGAGAACTTGTCAACTCATATCCACGTTATCTAGCAAAGTACATAAGAATCTATCACTAAGTAATGTATCCT
TCAGAATGTGTTGGTTTACCAGTGACACCCCATATTATCACAAAATTAAAGCAAGAAGTCCATAGTAATTTAT
TGCTAATAGTGGATTTTTAATGCTCAGAGTTTCTGAGGTCAAATTTTATCTTTTCACTTACAAGCTCTATGATCT
TAAATAATTTACTTAATGTATTTTGGTGTATTTTCTCAAATTAATATTGGTGTTCAGACTATATCTAATTCCT
CTGATCACTTTGAGAAACAACTTTTATTAATGTAAGGCACTTTCTATGAATTTTAAATATAAAAAATAATAT
TGTTCTGATTATTACTGAAAAGATGTCAGCCATTTCAATGTCTTGGGAACAATTTTTTGTTTTTGTCTGTTTT
CTTTTTGCTTCAATAAAACAATAGCTGGCTCT

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FIGURE 3149

GGCACGAGGCTGAGCGCTCCGACTTCCAGAGGAGCGCTGTGCACGTGGAGAAGAGCGGGGACTCGGCGACCCTGC
CCTCCCGACCCCTCATGTTTCGAAGAGCCTGAGTGGGCCGAGGCGGCCCCAGTAGCCGCGGGCCTTGGGCCCGTAAT
CTCACGACCTCCGCCCTGCGGCCTCCTCGCAAAACAAGGGCTCCAAGCGCCGCCAGCTCTTGGCCACATTACGGGC
CCTAGAGGCAGCATCTCTTTCCAGCATCCCCCAGCCTATGTATAAGTGAAGTCTGAGGAGGAGGAGGAGGAAAG
GAAGAAGAAATGCCCAAAAAGGCATCATTTGCCAGTGCCTCTGCTGAAGTAGGGAAGAAAGGGAAGAAGAAATG
TCAAAAACAGGGCCACCTTGCACTGACTCTGAGGAAGAAGTAGAAAGGAAGAAGAAATGCCACAAACAGGCTCT
TGTTGGCAGTGAAGTCTGCTGAAGATGAGAAAAAGAAAGAGGAAATGCCAGAAACATGCCCCATAAAATTCAGCCCA
GCACCTGGACAATGTTGACCAAAACAGGTCCCAAGCCTGGAAGGGTAGTACTACAAATGATCCACCAAGCAAAG
CCCTGGGTCCACTTCCCCTAAACCCCTCATACATTAAGCCGCAAGCAGTGGCGGAACCGGCAAAAGAATAAGAG
AAGATGTAAGAACAAGTTTCAGCCACCTCAGGTGCCAGACCAGGCCCCAGCTGAGGCCCCACAGAGAAGACAGA
GGTGTCTCCTGTTCCCAGGACAGACAGCCATGAGGCTCGGGCAGGGGCTTTGCGAGCCCGCATGGCACAGCGGCT
GGATGGGGCCCGATTTCGCTACCTCAATGAACAGTTGTAAGTCAAGGGCCCAGCAGTGTCTGCACAGCGTCTCTTCCA
GGAAGACCCTGAGGCTTTTCTTCTTACCACCGCGGCTTCCAGAGCCAAGTGAAGAAGTGGCCACTGCAGCCAGT
GGACCGCATCGCCAGGGATCTTCGCCAGCGGCTGCATCCCTAGTGGTGGCTGACTTCGGCTGTGGGGATTGCCG
CTTGGCTTCAAGTATCCGGAACCTGTGCATTGCTTTGACTTGGCTTCTCTGGACCCTAGGGTCACTGTGTGTGA
CATGGCCCAGGTTCTCTGGAGGATGAGTCTGTGGATGTGGCTGTGTTTGCCTTTCACTGATGGGAACCAACAT
CAGGGACTTCTTAGAGGAGGCAATAGAGTACTGAAGCCAGGGGGTCTCCTGAAAGTGGCTGAGGTCAAGCAGCCG
CTTTGAGGATGTTTGAACCTTTCTGCGGGCTGTGACCAAGCTAGGCTTCAAGATTGTCTCCAAGGACCTGACCAA
CAGCCATTTCTTCTTGTGTTGATTTCAAAAGACTGGGCCCCCTCTGGTAGGGCCCAAGGCTCAGCTTTAGGCCT
GCAGCTTCAGCCATGTCTCTACAAGCGCAGGTGACTCTGGATCTTCTTGAAGGGGAGGCAGATCTCAAATC
CAGGCTCAGAACTGTGAAGACTGTTTCCAGCCTGGCTGTGAGCCAAGACCTGGTTCTGGTGGACCTGAGGACA
AAGTGTGATAAAACCTCTGGCTCAGACTTGCTCTACTGAAGGCTTCTTGGTTATAAGATGCATAAAGTCACTGGG
GCTAGCTAAACAATAAAGAGTTTATTGTGAGAAAAA

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FIGURE 3150

MFEEPEWAEAAPVAAGLGPVISRPPPAASSQNKGSKRRQLLATLRALEAASLSQHPPSLCISDSEEEEEERKKKC
PKKASFASASAEVGGKGGKKKCQKQGPPCSDSEEEVERKKKCHKQALVGSDSAEDEKRKRKCQKHAPINSAQHLDN
VDQTGPKAWKGSTTNDPPKQSPGSTSPKPPHTLSRKQWRNRQKNKRRCKNKFQPPQVPDQAPAEAPTEKTEVSPV
PRTDSHEARAGALRARMQRLDGARFRYLNEQLYSGPSSAAQRLFQEDPEAFLLYHRGFQSQVKKWPLQPVDRIA
RDLRQRPASLVVADFGCGDCRLASSIRNPVHCFDLASLDPRVTVCDMAQVPLEDESVDVAVFCLSLMGTNIRDFL
EEANRVLKPGGLLKVAEVSSRFEDVRTFLRAVTKLGFKIVSKDLTNSHFFLFDFQKTGPPLVGPKAQLSGLQLQP
CLYKRR

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FIGURE 3151

ACGGGAGTTCCCCGGAGAAGGATCCTGCAGCCCGAGTCCCAGGATAAAGCTTGGGGTTTCATCCTCCTTCCCTGG
ATCACTCCACAGTCCTCAGGCTTCCCCAATCCAGGGGACTCGGCGCCGGGACGCTGCTATGGACGACATTTTCAC
TCAGTGCCGGGAGGGCAACGCAGTCGCCGTTTCGCCTGTGGCTGGACAACACGGAGAACGACCTCAACCAGGGGGA
CGATCATGGCTTCTCCCCCTTGCACTGGGCCTGCCGAGAGGGCCGCTCTGCTGTGGTTGAGATGTTGATCATGCCG
GGGGGCACGGATCAATGTAATGAACCGTGGGGATGACACCCCCCTGCATCTGGCAGCCAGTCATGGACACCGTGA
TATTGTACAGAAGCTATTGCAGTACAAGGCAGACATCAATGCAGTGAATGAACATGGGAATGTGCCCTGCCTA
TGCTGTTTTTTGGGGCCAAGATCAAGTGGCAGAGGACCTGGTGGCAAATGGGGCCCTTGTGAGCATCTGTAAACAA
GTATGGAGAGATGCCTGTGGACAAAGCCAAGGCACCCCTGAGAGAGCTTCTCCGAGAGCGGGCAGAGAAGATGGG
CCAGAATCTCAACCGTATTCCATACAAGGACACATTCTGGAAGGGGACCACCCGCACTCGGCCCCGAAATGGAAC
CCTGAACAAACACTCTGGCATTGACTTCAAACAGCTTAACCTTCTGACGAAGCTCAACGAGAATCACTCTGGAGA
GCTATGGAAGGGCCGCTGGCAGGGCAATGACATTGTCTGTAAGGTGCTGAAGGTTTCGAGACTGGAGTACAAGGAA
GAGCAGGGACTTCAATGAAGAGTGTCCCCGGCTCAGGATTTTCTCGCATCCAAATGTGCTCCAGTGCTAGGTGC
CTGCCAGTCTCCACCTGCTCCTCATCCTACTCTCATCACACACTGGATGCCATATGGATCCCTCTACAATGTACT
ACATGAAGGCACCAATTTCTGTCGTGGACCAGAGCCAGGCTGTGAAGTTTGCTTTGGACATGGCAAGGGGCATGGC
CTTCCTACACACACTAGAGCCCCTCATCCCAGACATGCACTCAATAGCCGTAGTGTAAATGATTGATGAGGACAT
GACTGCCCCGAATTAGCATGGCTGATGTCAAGTTCTCTTTCCAATGTCTGGTTCGCATGTATGCACCTGCCTGGGT
AGCCCCGAAGCTCTGCAGAAGAAGCCTGAAGACACAAACAGACGCTCAGCAGACATGTGGAGTTTTCAGTGCT
TCTGTGGGAAGTGGTGACACGGGAGGTACCCTTTGCTGACCTCTCCAATATGGAGATTGGAATGAAGGTGGCATT
GGAAGGCCTTCGGCCTACCATCCCACAGGTATTTCCCCTCATGTGTGTAAGCTCATGAAGATCTGCATGAATGA
AGACCTGCAAAGCGACCCAAATTTGACATGATTGTGCCTATCCTTGAGAAGATGCAGGACAAGTAGGACTGGAA
GGTCCTTGCTGAACTCCAGAGGTGTCGGGACATGGTTGGGGGAATGCACCTCCCCAAAGCAGCAGGCCTCTGGT
TGCTCCCCCGCCTCCAGTCATGGTACTACCCAGCCATGGGGTCCATCCCCTTCCCCCATCCCTACCACTGTGG
CCCCAAGAGGGGCGGGCTCAGAGCTTTGTCACTTGCCACATGGTGTCTCCAACATGGGAGGGATCAGCCCCGCC
TGTCACAATAAGTTTATTATG

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FIGURE 3152

ACATGACAGCAGATCCGCGGAAGGGCAGAATGGGACTCCAAGCCTGCCTCCTAGGGCTCTTTGCCCTCATCCTCT
CTGGCAAATGCAGTTACAGCCCGAGCCCGACCAGCGGAGGACGCTGCCCCAGGCTGGGTGTCCCTGGGCCGTG
CGGACCCTGAGGAAGAGCTGAGTCTCACCTTTGCCCTGAGACAGCAGAATGTGGAAAGACTCTTGAGCTGGTGC
AGGCTGTGTGCGATCCAGCTCTCCTCAATACGGAATAACCTGACCCTAGAGAATGTGGCTGATCTGGTGAGGC
CATCCCCACTGACCCTCCACACGGTGCAAAAATGGCTCTTGGCAGCCGGAGCCCAGAAGTGCCATTCTGTGATCA
CACAGGACTTTCTGACTTGCTGGCTGAGCATCCGACAAGCAGAGCTGCTGCTCCCTGGGGCTGAGTTTCATCACT
ATGTGGGAGGACCTACGGAGACCCATGTTGTAAGGTCCCACATCCCTACCAGCTTCCACAGGCCTTGGCCCCC
ATGTGGACTTTGTGGGGGGACTGCACCGTTTTTCCCCAACATCATCCCTGAGGCAACGTCCTGAGCCGAGGTGA
CAGGGACTGTAGGCCTGCATCTGGGGGTAACCCCTCTGTGATCCGTAAGCGATACAACCTTGACCTCACAAGACG
TGGGCTCTGGCACCAGCAATAACAGCCAAGCCTGTGCCAGTTTCTGGAGCAGTATTTCCATGACTCAGACCTGG
CTCAGTTCATGCGCCTCTTCGGTGGCAACTTTGCACATCAGGCATCAGTAGCCCGTGTGGTTGGACAACAGGGCC
GGGGCCGGGCCGGGATTGAGGCCAGTCTAGATGTGCAGTACCTGATGAGTGCTGGTGCCAACATCTCCACCTGGG
TCTACAGTAGCCCTGGCCGGCATGAGGGACAGGAGCCCTTCTGCAGTGGCTCATGCTGCTCAGTAATGAGTCAG
CCCTGCCACATGTGCATACTGTGAGCTATGGAGATGATGAGGACTCCCTCAGCAGCGCCTACATCCAGCGGGTCA
AACTGAGCTCATGAAGGCTGCCGCTCGGGGTCTCACCTGCTCTTCGCCTCAGGTGACAGTGGGGCCGGGTGTT
GGTCTGTCTCTGGAAGACACCAGTTCCGCCCTACCTTCCCTGCCTCCAGCCCCCTATGTCACCACAGTGGGAGGCA
CATCCTTCCAGGAACCTTTCTCATCACAATGAAATTGTTGACTATATCAGTGGTGGTGGCTTCAGCAATGTGT
TCCCACGGCCTTCATACCAGGAGGAAGCTGTAACGAAGTTCCTGAGCTCTAGCCCCACCTGCCACCATCCAGTT
ACTTCAATGCCAGTGGCCGTGCCTACCCAGATGTGGCTGCACTTTCTGATGGCTACTGGGTGGTCAGCAACAGAG
TGCCCATTCATGGGTGTCCGGAACCTCGGCCCTACTCCAGTGTGTTGGGGGGATCCTATCCTTGATCAATGAGC
ACAGGATCCTTAGTGGCCGCCCCCTCTTGGCTTTCTCAACCCAAAGGCTCTACCAGCAGCATGGGGCAGGACTCT
TTGATGTAACCCGTGGCTGCCATGAGTCTGTCTGGATGAAGAGGTAGAGGGCCAGGGTTTCTGCTCTGGTCTCTG
GCTGGGATCCTGTAACAGGCTGGGGAACACCCAACTTCCCAGCTTTGCTGAAGACTCTACTCAACCCCTGACCCT
TTCTATCAGGAGAGATGGCTTGTCCCTGCCCTGAAGCTGGCAGTTCAGTCCCTTATTCTGCCCTGTTGGAAGC
CCTGCTGAACCTCAACTATTGACTGCTGCAGACAGCTTATCTCCCTAACCTGAAATGCTGTGAGCTTGACTTG
ACTCCCAACCCCTACCATGCTCCATCATACTCAGGTCTCCCTACTCCTGCCTTAGATTCTCAATAAGATGCTGTA
ACTAGCATTTTTTGAATGCCTCTCCCTCCGCATCTCATCTTTCTCTTTCAATCAGGCTTTTCCAAAGGGTTGTA
TACAGACTCTGTGCACTATTTCACTTGATATTCACTCCCAATCACTGCAAGGAGACCTCTACTGTCACCGTTT
ACTCTTTTCTACCTGACATCCAGAAACAATGGCCTCCAGTGCATACTTCTCAATCTTTGCTTTATGGCCTTTCC
ATCATAGTTGCCCACTCCCTCTCCTTACTTAGCTTCCAGGTCTTAACCTCTCTGACTACTCTTGCTCTTCTCTCT
CATCAATTTCTGCTTCTTCATGGAATGCTGACCTTCATTGCTCCATTGTAGATTTTGTCTTCTCAGTTTACT
CATTGTCCCTGGAACAAATCACTGACATCTACAACCATACCATCTCACTAAATAAGACTTTCTATCCAATAAT
GATTGATACCTCAAATGTAAGATGCGTGATACTCAACATTTCAATCGTCCACCTTCCCAACCCCAACAATTCAT
CTCGTTTCTTCTTGGTAAATGATGCTATGCTTTTCCAACCAAGCCAGAAACCTGTGTCATCTTTTACCCCCACC
TTCAATCAACAAGTCTCAATCAACAAGTCTTACTGACTGCACATCTTAAATATATCTTTATCAGTCCACAAGTC
CTTCCAATTATATTTCCCAAGTATATCTAGAACCTTATCCACTTATATCCCCACTGCTACTACCTTAGTTTAGGGC
TATATTCTCTTGAAAAAAGTGTCTTACTTCTTGCCAATCCCCAAGTCATCTTCCAGAGTAAATGCAATCCC
ATCAGGCCACTTGGATGAAAACCCCTTCAAGGATTACTGGATAGAATTCAGGCTTTCCCTCCACCCCCCAATCAT
AGCTCACAAACCTTCTTGCTATTGTCTTAAAGTAAAAAATCATTTTTCTCTCTCCCTCCCAACCCCAAGGA
ACTCTCACTCTTGCTCAAGCTGTTCCGTCCCCTTACCACCCCTGATACAACCTGCCAGGTTAATTTCCAGAATTCT
TGCAAGACTCAGTTCAGAACTCACCTTCTTTCTGTAATGTTTTGATTCCCTGAGGCTACTTTATTTTGGTATGGC
TGAAAAATCCTAGATTTTCTAAACAAAACCTGTTTGAATCTTGGTTCTGATATGGACTAGGAGAGAGACTGGGTC
AAGTAAGCTTATCTCCCTGAGGCTGTTTCCCTCGTCTGTTAAGTGTGAATATCAATACCTGCCTTTTCATAATCACC
AGGGAATAAAGTGGAATAATGTTGATAACAGTGCTTGGCACCTGGAAGTAGGTGGCAGATGTTAACGCCCTTCT
CCCTTGCACTGCGCCCCCTGTGCCTACCTCTAGCATTGTAACGACCACATAGTATTGAAATGGCCAGTTTACTTG
TCTGCCTTCTTTCCAAGACCGTTGGTGCCTAGAGGACTAGAATCGTGCTCTATTTAACTTTGTGTTCCAGGTC
CTAGCTCAGGAGTTGGCAAATAAGAATTAATGTCTGCTACACCGAAA

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GCTGTGCAGGAGGCGCGGCCCGGGCGCTCAGCGGACGACCGCATCGCGGGCCAAGGGGCGCGCGGTTCCGACGGCGGGC
TGCCCGGAGGGGATCGCGGGCCTCGGAGACAGCGACTGCGGACGATGCGCGGCTTCAGGCCCGCGCGAGCGGGC
GCTGCCCGGGGGGCTGACCGCGGCCGGACGGCGCCCCAGCACCGGGCGAGGGAGCCCGCGTTCGCGCGGAGGTTCAG
GGAGCCTGAGCTGGAGGCCAGGGCCCCAGTGGGACCTGACCCAAAGTCTGAGGTCAAGCTGGGCCACAGACCTGGC
CTGGAGCTGGAGCCCCAAGGCACAGCTGGACTACCCTTGTCATGCAGAAAGGAGCTGGGCATTGTGCCTTCCTGCC
TGGCATGAAGAGCCCCAGGCCCCACCTCCTGCTACCATTGCTGCTGCTGCTGCTGCTGCTGCTGGGGGCTGGGGT
GCCAGGTGCCTGGGGTCAGGCTGGGAGCCTGGACTTGAGATTGATGAGGAGCAGCCAGCGGGTACACTGATTGG
CGACATCAGTGCGGGGCTTCCGGCAGGCACGGCAGCTCCTCTCATGTACTTCATCTCTGCCAAGAGGGCAGCGG
CGTGGGCACAGACCTGGCCATTGACGAACACAGTGGGGTCGTCCGTACAGCCCGTGTCTTGGACCGTGAGCAGCG
GGACCGCTACCGCTTCACTGCAGTCACTCCTGATGGTGCCACCGTAGAAGTTACAGTGCAGAGTGGCTGACATCAA
CGACCATGCTCCAGCCTTCCCACAGGCTCGGGCTGCCCTGCAGGTACCTGAGCATAACAGCTTTTGGCACCCGCTA
CCCACTGGAGCCTGCTCGTGATGCAGATGCTGGGCGTCTGGGAACCCAGGGCTATGCGCTATCTGGTGATGGGGC
TGGAGAGACCTTCCGGCTGGAGACACGCCCCGGTCCAGATGGGACTCCAGTACCTGAGCTGGTAGTTACTGGGGA
ACTGGACCGAGAGAACCCTCACACTATATGCTACAGCTGGAGGCCTATGATGGTGGTTACCCCCCGGAGGGC
CCAGGCCCTGCTGGACGTGACACTGCTGGACATCAATGACCATGCCCGGCTTTCAATCAGAGCCGCTACCATGC
TGTGGTGTCTGAGAGCCTGGCCCCTGGCAGTCCTGTCTTGACAGGTGTTTCGCATCTGATGCCGATGCTGGTGTCAA
TGGGGCTGTGACTTACGAGATCAACCGGAGGCAGAGCGAGGGTGATGGACCCTTCTCCATCGACGCACACACGGG
GCTGCTGCAGTTAGAGCGGCCACTGGACTTTGAGCAGCGGGCGGGTCCATGAAGTGGTGGTGCAAGCACGAGATGG
TGGGGCTCACCTGAGCTGGGCTCGGCCCTTTGTGACTGTGCATGTGCGAGATGCCAATGACAATCAGCCCTCCAT
GACTGTCTATCTTTCTCAGTGCAGATGGCTCCCCCAAGTGTCTGAGGCCGCCCCACCTGGACAGCTCGTTGCTCG
CATCTCTGTGTGACAGCCAGATGATGGTGACTTTGCCCATGTCAATGTGTCCCTGGAAGGTGGAGAGGGGCCACTT
TGCCCTAAGCACCCAAGACAGCGTCACTATCTGGTGTGTGTGGCTCGGCGGCTGGATCGAGAGGAGAGGGGATGC
CTATAACTTGAGGGTTACAGCCACAGACTCAGGCTCACCTCCACTGCGGGCTGAGGCTGCCTTTGTGCTGCACGT
CACTGATGTCAACGACAATGCACCTGCCTTTGACCGCCAGCTCTACCGACCTGAGCCCTGCCTGAGGTTGCGCT
GCCTGGCAGCTTTGTAGTGCGGGTGACTGCTCGGGATCCTGACCAAGGCACCAATGGTGAGGTCACTTATAGCCT
AGCCCCCTGGCGCCACACCCACTGGTTCTCCATTGACCCACCTCAGGCATTATCACTACGGCTGCCTCACTGGA
CTATGAGTTGGAACCTCAGCCACAGCTGATTGTGGTGGCCACAGATGGTGGCCTGCCCCCTTAGCCTCCTCTGC
CACAGTTAGCGTGGCCCTGCAAGATGTGAATGATAATGAGCCCCAATTCCAGAGGACTTCTACAATGCCCTCACT
GCCTGAGGGCACCCAGCCTGGAACCTTGCTTCCCTGCAGGTGACAGCCACAGACGCGGATAGTGGCCCATTTGGCCT
CCTCTCCTATTCTTTGGGTGCTGGACTTGGGTCTCCGGATCTCCCCCATTCGCGATTGATGCCACAGCGGTGA
TGTGTGCACAACCCGGACCTGGACCGTGACCAGGGGGCCCAAGCTTTGACTTCACAGTGACAGCTGTGGATGG
GGGAGGCCTCAAGTCCATGGTATATGTGAAGGTGTTTCTGTGACAGGAGAATGACAACCCCTCTCAGTTTTATCC
ACGGGAGTATGCTGCCAGTATAAGTGCCACAGAGTCCACCAGGCACAGCTGTGCTGAGGTTGCGTGCCCATGACCC
TGACCAGGGATCCCATGGGCGACTCTCCTACCATATCCTGGCTGGCAACAGCCCCCACTTTTTACCTTGATGA
GCAATCAGGGCTGTTGACAGTAGCCTGGCCCTTGCCAGACGGGCCAATTCTGTGGTGCAGCTGGAGATCGGGGC
TGAGGACGGAGGTGGCTACAGGCAGAACCCAGTGCCCGAGTGAGACATCAGCATTGTGCCTGGAACCCCCACACC
ACCCATATTTGAGCAACTACAGTATGTTTTTTCTGTGCCAGAGGATGTGGCACCAGGCACCAGTGTGGGCATAGT
CAGGCACACAAACCCACAGGTCGCTTGGCACCTGTGACCCTTTCCCTATCAGGTGGGGATCCCCGAGGACTCTT
CTCCCTAGATCGGTTATCAGGACTGTTGCAAACTTCGCCCTCTGGACCGGGAGCTACTGGGACCACTGTTGGA
GCTGGAGGTGCGAGCAGGCAGTGAGTGCCCCAGCTTTGCTGTAGCTCGGGTGCGTGTGCTGCTGGATGATGT
GAATGACAACCTCCCTGCCTTTCTGCGAGCTGAAGACAGGTATTGCTACCACCAAACACTGCCCCAGGGACTCC
CATCTATACACTGCGGGCTCTTGACCCCGACTCAGGTGTTAACAGTGCAGTACCTTTACCCTGCTTGTGCTGGGG
TGGTGGAGCCTTACCCTGGACCCACACAGGCCATGTACGCGCTTAGAGGCCCTTGGGGCCCTCAGGAGGGCC
AGCCCATGAGCTGGAGCTGGAGGCCCGGGATGGGGGCTCCCCACCACGCACCAAGCCACTTTCGACTACGGGTGGT
GGTACAGGATGTGGGAACCCGTGGGCTGGCTCCCCGATTCAACAGCCCTACCTACCCTGTGGACCTGCCCTCAGG
CACCCTGCTGGAACCTCAGGTCTTGCAAGTGACAGGCCCAAGCACAGATGGGGGGCCCTATCACCCTATCACCTTGC
AGCAGAGGGAGCAAGTAGCCCTTTGGCCTGGAGCCACAGAGTGGGTGGCTATGGGTGCGGGCAGCACTAGACCG
TGAGGCCCAAGGAATTGTACATACTGAAGGTAATGGCAGTGTCTGGGTCCAAAGCTGAGTTGGGGCAGCAGACAGG

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FIGURE 3153B

CACAGCCACCGTGAGGGTCAGCATCCTCAACCAGAATGAACACAGTCCCCGCTTGTCTGAGGATCCACCTTCCT
GGCTGTGGCTGAGAACCAGCCCCAGGGACCAGCGTGGGCCGAGTCTTTGCCACTGACCGAGACTCAGGACCCAA
TGGACGTCTGACCTACAGCCTGCAACAGCTGTCTGAAGACAGCAAGGCCTTCCGCATCCACCCCCAGACTGGAGA
AGTGACCACACTCCAAACCCTGGACCGTGAGCAGCAGAGCAGCTATCAGCTCCTGGTGCAGGTGCAGGATGGAGG
GAGCCCACCCCGCAGCACCACAGGCACTGTGCATGTTGCAGTGCTTGACCTCAACGACAACAGCCCCACGTTCT
GCAGGCTTCAGGAGCTGCTGGTGGGGGCCTCCCTATACAGGTACCAGACCGCGTGCCCTCCAGGAACACTGGTGAC
GACTCTGCAGGCGAAGGATCCAGATGAGGGGGAGAATGGGACCATCTTGTACACGCTAACTGGTCTGGCTCAGA
GCTTTTCTCTCTGCACCTCACTCAGGGGAGCTGCTCACTGCAGCTCCCTGATCCGAGCAGAGCGGGCCCCACTA
TGTGCTGACACTGAGTGCTCATGACCAAGGCAGCCCTCCTCGAAGTGCCAGCCTCCAGCTGAGTGCAGGTGCT
TCCCTCAGCTCGCTTGCGCGAGCCGCCCCAGATCTCGCAGCGGGACCAGCCAGCGGACCTGCTGCTGCT
GACGGTGACAGCAGCTGAGGGACTGCGGCCCGGCTCTGTTGGGCTCGGTGGCAGCGCCAGAGCCCGCGGTGT
GGGTGCACTACCTACACACTGGTGGCGGTGCCGATCCCGAGGGCACCTTCGCGCTGGATGCGGCCCTCAGGGCG
CTTGTACCTGGCGCGGCCCTGGACTTCGAAGCTGGCCCGCGTGGCGCGCGCTCACGGTACGCGCTGAGGGGCC
GGGAGCGCGGGCGCGCGGCTGCTGCGAGTGCAAGTGCAAGTGCAAGTGCAAGTGCAAGTGCAAGTGCAAGTGCA
GCGCGACCCGCTGGCGCTGGCGCTGCCAGAGAACCCGGAGCCCGCGCAGCGCTGTACACTTTCCGCGCGTTCGA
CGCGACGGCCCCGGCCCCAATAGCGACGTGCGCTACCGCCTGCTGCGCCAGGAGCCGCGCGTGGCGCGCTTCG
CCTGGACGCGCGCACCGGGGCGCTCAGCGCTCCGCGCGGCTGGACCGAGAGACCCTCCCGCGCTGCTGCTGCT
GGTGGAAGCCACCGACCGGCCGCCAAGCCAGCCGCGCTCGTGACGCGCGCTTTAGCGCGCGCTTTCGTCAC
GGATGAGAATGACAACGCGCCTGTCTTCGCTCGCGCTCACGCGTGCGCTCCAGAGGACCAGCGCCTGGGCC
CGCGGCCCTGCACGTGGTAGCCCGGGACCCGGATCTGGGCGAGGCTGCACGCGTGCTCTATCGGCTGGCATCTGG
CGGGGACGGCCACTTCCGGCTGCACTCAAGCACTGGAGCGCTGTCCGTGGTGGCGGCCGTTGGACCGCAACAACG
AGCTGAGCAGTACTGACAGTGGTGGCCTCAGACCACGGCTCCCCGCGCGCTCGGCCACGCAGGTCTGACCGT
CAGTGTCGCTGACGTCAACGACGAGGCGCCTACTTTCCAGCAGCAGGAGTACAGCGTCTCTTGCCTGAGAACA
CCCTCCTGGCACATCTCTGCTCACCCTGCGAGCAACCGACCCGACGTGGGGGCCAAGGGCAAGTGACTTATGG
AGGCGTCTCTAGCGAAAGCTTTTCTCTGGATCCTGACACTGGTGTCTCACGACTCTTCGGGCCCCGGATCGAGA
GGAACAGGAGGAGATCAACCTGACAGTGTATGCCAGGACAGGGGCTCACCTCCTCAGTTAACGCATGTCACTGT
TCGAGTGGCTGTGGAGGATGAGAATGACCATGCACCAACCTTTGGGAGTGCCATCTCTCTGAGGTTGCTGTA
GGGCCAGGACCCCGACCCCTTACCATGCTTCGGGCTCTGATCCAGATGTGGGAGCCAATGGGCAGTTGCAGTA
CCGCATCCTAGATGGGGACCCATCAGGAGCCTTTGTCTAGACCTTGCTTCTGGAGAGTTTGGCACCATGCGGCC
ACTAGACAGAGAAGTGGAGCCAGCTTTCCAGCTGAGGATAGAGGCCCGGGATGGAGGCCAGCCAGCTCTCAGTGC
CACGCTGCTTTTGACAGTGACAGTGCTGGATGCCAATGACCATGCTCCAGCCTTTCTGTGCTGCTACTCGGT
GGAGGTGCCGGAGGATGTGCTGCAGGGACCTGCTGCTGCAGCTACAGGCTCATGACCCTGATGCTGGAGCTAA
TGGCCATGTGACCTACTACCTGGGCGCCGCTACAGCAGGAGCCTTCCTGCTGGAGCCCAGCTCTGGAGAATGCG
CACAGCTGCAGCCTTGGACAGAGAACAGTGTCCAGCTACACCTTTTCTGTGAGTGCAAGTGGATGGTGCAGCTGC
TGGGCCCCCTAAGCACACAGTGTCTGTACCATCACGGTGCAGGATGTCAATGACCATGCACCCACCTTCCCCAC
CAGTCTCTGCGCCTACGTCTGCCCCGCCCAGGCCCGAGCTTCAGTACCCCAACCCTGGCTCTGGCCACACTGAG
AGCTGAAGATCGTGATGCTGGTGCCAATGCTTCCATTCTGTACCGGCTGGCAGGCACACCCTCCTGGCACTAC
TGTGGACTCTTACACTGGTGAATCCGCGTGGCCGCTCTCCTGTAGCTCTAGGCCCCGAGATCGTGTCTCTT
CATTGTGGCACTGATCTTGGCCGTCCAGCTCGCTCTGCCACTGGTGTGATCATTGTGGACTGCAGGGGAAGC
TGAGCGTGGACCCCGCTTTCCCCGGGCTAGCAGTGAGGCTACGATTCTGTGAGAATGCGCCCCAGGGACTCCTAT
TGTCTCCCCACGGCCGTCCATGCAGGAGGCACAAATGGACCCATCACCTACAGCATTCTCAGTGGGAATGAGAA
AGGGACATTCTCCATCCAGCCTAGTACAGGTGCCATCACAGTTCGCTCAGCAGAGGGGCTAGACTTCAGAGTGAG
TCCACGGCTGCGACTGGTGTGTCAGGCAGAGAGTGGAGGAGCCTTTCCTTCACTGTGCTGACCCTGACCCTGCA
AGATGCCAACGACAATGCTCCCCGTTTCTGCGGCCCATATGTGGCCTTCTTCTGAGTCCCGGCCCTTGGGA
GGGGCCCCCTGCTGCAGGTGGAGGCGGATGACCTGGATCAAGGCTCTGGAGGACAGATTTCTACAGTCTGGCTGC
ATCCAGCCGGCACGTGGATTGTTCCACGTAGACCCAACCACAGGCACTATCACTACCACAGCCATCCTGGACCG
TGAGATCTGGGCTGAAACACGGTTGGTGTGATGGCCACAGACAGAGGGAGCCCGAGCCCTGGTGGGCTCAGCTAC
CTTGACGGTGTGTTATCGACACCAATGACAATCGCCCCACCATCCCCCAACCCTGGGAGCTCCGAGTGTGAGA

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FIGURE 3153C

AGATGCGTTATTGGGCTCAGAGATTGCACAGGTAACAGGGAATGATGTGGACTCAGGACCCGTGCTGTGGTATGT
GCTAAGCCCATCTGGGCCCCAGGATCCCTTCAGTGTGGCCGCTATGGAGGCCGTGTCTCCCTCACGGGGCCCT
GGACTTTGAGCAGTGTGACCGCTACCAGCTGCAGCTGCTGGCACATGATGGGCCTCATGAGGGCTGTGCCAACCT
CACAGTGCTTGTGGAGGATGTCAATGACAATGCACCTGCCTTCTCACAGAGCCTCTACCAGGTAATGCTGCTTGA
GCACACACCCCCAGGCAGTGCCATTCTCTCCGTCTCTGCCACTGATCGGGACTCAGGTGCCAACGGTCACATTTC
CTACCACCTGGCTTCCCTGCCGATGGCTTCAGTGTGACCCCAACAATGGGACCCTGTTACAATAAGTGGGAAC
AGTGGCCTTGGGCCATGACGGGTGACGAGCAGTGGATGTGGTGTGGAAGCACGAGACCACGGGGCTCCAGGCCG
GGCAGCACGAGCCACAGTGCACGTGCAGCTGCAGGACCAGAACGACCACGCCCGAGCTTCACATTGTCACACTA
CCGTGTGGCTGTGACTGAAGACCTGCCCCCTGGCTCCACTCTGCTCACCCTGGAGGCTACAGATGCTGATGGAAG
CCGCAGCCATGCCGCTGTGGACTACAGCATCATCAGTGGCAACTGGGGCCGAGTCTTCAGCTGGAACCCAGGCT
GGCTGAGGCTGGGGAGAGTGTGAGACCAGGCCCCCGGGCACTGGGCTGCCTGGTGTGCTTGAACCTCTAGACTT
TGAAAGCCTGACACAGTACAATCTAACAGTGGCTGCAGCTGACCGTGGGCAGCCACCCCAAAGCTCAGTCGTGCC
AGTCACTGTCACTGTACTAGATGTCAATGACAACCCACCTGTCTTTACCCGAGCATCCTACCGTGTGACAGTACC
TGAAGACACACCTGTTGGAGCTGAGCTGTGATGTAGAGGCCTCTGACGCTGACCCCTGGCCCTCATGGCCCTGT
GCGTTTCACTGTGAGCTCAGGCGACCCATCAGGGCTCTTTGAGCTGGATGAGAGCTCAGGCACCTTGCAGCTGGC
CCATGCCCTGGACTGTGAGACCCAGGCTCGACATCAGCTTGTAGTACAGGCTGCTGACCCTGCTGGTGCACACTT
TGCTTTGGCACCAGTGACAATTGAGGTCCAGGATGTGAATGATCATGGCCAGCCTTCCCACTGAACCTTACTCAG
CACCAGCGTGGCCGAGAATCAGCCTCCAGGCACTCTCGTGACCACTCTGATGCAATCGACGGGGATGCTGGGGC
TTTTGGGAGGCTCCGTTACAGCCTGTTGGAGGCTGGGCCAGGACCTGAGGGCCGTGAGGCATTGCACTGAACAG
CTCAACAGGGGAGTTGCGTGCAGGAGTGCCCTTTGACTATGAGCACACAGAAAGCTTCCGGCTGCTGGTGGGTGC
TGCTGATGCTGGGAATCTCTCAGCCTCTGTCACTGTGTCGGTGTAGTACTGGAGAGGATGAGTATGACCCTGT
ATTTCTGGCACCAGCTTTCCACTTCCAAGTGCCCGAAGGTGCCCGGCGTGGCCACAGCTTGGGTACGTGCAGGC
CACAGATGAGGATGGGGGTGCCGATGGCCTGGTTCTGTATTCCCTTGCCACCTCTTCCCCCTATTTTGGTATTAA
CCAGACTACAGGAGCCCTGTACCTGCGGGTGGACAGTGGGCACAGGCAGCGGAACAGCCACCTCTGGGGGTGG
GGGCCGGACCCGGCGGGAAGCACACGGGAGCTGAGGCTGGAGGTGATAGCACGGGGGCTCTGCCTGGTTCCCG
GAGTGCCACAGTGCCTGTGACCGTGGATATCACCCACACCGCACTGGGCCTGGCACCTGACCTCAACCTGCTATT
AGTAGGGGCCGTGGCAGCCTCCTTGGGAGTTGTGGTGGTGTGCTGCACTGGCAGCCCTGGTCTAGGACTTGTTCG
GGCCCGTAGCCGCAAGGCTGAGGCAGCCCTGGCCCAATGTACAGGCAGCACCCCTAGCCAGTACTCACTGCA
GAAACTGGGCCGGGAGCCACCTAGTCCACCACCTCTGAGCACCTCTATCACCAGACTCTTCCAGCTATGGTGG
GCCAGGAGCTGGAGGACCCTACCCCGTGGTGGCTCCTTGGACCCTTACATTCAAGTGGCCGAGGATCAGCAGA
GGCTGCAGAGGATGATGAGATCCGATGATCAATGAGTTCCCCCGTGTGGCCAGTGTGGCTCCTCTCTGGCTGC
CCGTGGCCCTGACTCAGGCATCCAGCAGGATGCAGATGGTCTGAGTGACACATCCTGCGAACCACCTGCCCTGA
CACCTGGTATAAGGGCCGAAAGGCAGGGCTGCTGCTGCCAGGTGCAGGAGCCACTCTCTACAGAGAGGAGGGGCC
CCCAGCCACTGCCACAGCCTTCTTGGGGGGCTGTGGCTGAGCCCTGCACCCACTGGGGACTATGGCTTCCCGAGC
AGATGGCAAGCCATGTGTGGCAGGTGCGCTGACAGCCATTGTGGCCGGCGAGGAGGAGCTCCGTGGCAGCTATAA
CTGGGACTACCTGCTGAGCTGGTGGCCCTCAGTTCCAACCACTGGCCAGTGTCTTACAGAGATCGCTCGGCTCAA
GGATGAAGCTCGGCCATGTCCCCCAGCTCCCCGTATCGACCCACCACCCCTCATCACTGCCGTGGCCACCCAGG
AGCCAAGTCTGTGCCCCCAAGCCAGCAAACACAGCTGCAGCCGGGCCATCTTCCACCAAGCTTCTCACCGCTC
CCCCATCAGCCATGAAGGCTCCCTGTCTCAGCTGCCATGTCCCCCAGCTTCTCACCCCTCTCTGTCTCTCTGGC
TGCTCGCTCACCCGTTGTCTCACCATTGGGGTGGCCAGGGTCCCTCAGCCTCAGCACTCAGCGCAGAGTCTGG
CCTGGAGCCACCTGATGACACGGAGCTGCACATCTAGCTGTGGCCAGGCTGGGCCCCGACCTGGGATGCGCACA
GTGTCCCCAACGCAGGCCCCACTCTGAGCCTGCCCTGGGCAGCCTCGGACTATGACTGGCTACGGGGAGGCCACC
ACCAGGCCCCAGCTCTCCACCCTGAACTCCCCAGCCCCCTCAGAGTACTAGGACCACAGAAGCCCTGTTGCTCAC
TGACCTGTGACCAGGTCCAATGTGGGGAGAAATATGAAGGAGGTAGCAGCCCTGGGTTCTCCTCAGTGAGGGATC
CCTGCCCTGCACCAGCACCTTGAGATGGAGCTGAGACTTTATTTATTGGGGGTAGGGGGATGGAGGAGGTCCCTC
CAACATGTTTGGACCCAGCTCCTTTGGGTCCACTGACACCCCTGCCCTGCCCTGCCAGAACCAAGTGCCAT
TTCTCACTCTGGAGCCTTAATAAACTGCAATTTGT

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FIGURE 3154

MKAPCPQLPCPPASHPLCLLWLLAHPLSHHLGWPRVPQPQHSAQSLAWSHLMTRSC TSSCGPGWAPTWDAHSVPN
AGPTLSLPWAASDYDWLRGGHHQAPALHPELPSPLRVLGPQKPCCSLTCDQVQCGEKYEGGSSPGFSSVRDPCPA
PAP

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FIGURE 3155

CTTTTTCGTCTGGGCTGCCAACATGCCATCCAGACTGAGGAAGACCCGGAACTTAGGGGCCACGTGAGCCACGG
CCACGGCCGCATAGGCAAGCACCGGAAGCACCCGGCGGCCGCGGTAATGCTGGTGGTCTGCATCACCACCGGAT
CAACTTCGACAAATACCACCCAGGCTACTTTGGGAAAGTTGGTATGAAGCATTACCACTTAAAGAGGAACCAGAG
CTTCTGCCCCAACTGTCAACCTTGACAAATTGTGGACTTTGGTCAGTGAACAGACACGGGTGAATGCTGCTAAAAA
CAAGACTGGGGCTGCTCCCATCATTGATGTGGTGGATCGGGCTACTACAAAGTTCTGGGAAAGGGAAAGCTCCC
AAAGCAGCCTGTCTATCGTGAAGGCCAAATTCTTCAGCAGAAGAGCTGAGGAGAAGATTAAGAGTGTTGGGGGGGC
CTGTGTCCTGGTGGCTTGAAGCCACATGGAGGGAGTTTCATTAAATGCTAACTACTTTTAAAAA

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FIGURE 3156

MPSRLRKTRKLRGHVSHGHGRIGKHKHPGGRGNAGGLHHHRINFDKYHPGYFGKVGMMKHYHLKRNQSFCPTVNL
DKLWTLVSEQTRVNAAKNKTGAAPIIDVVRSGYYKVLGKGKLPKQPVIVKAKFFSRRAEEKIKSVGGACVLVA

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FIGURE 3157A

AAGGCATCCAGGATGCGGTGCGGGGCGGCCCGGTGCCCCCGCCCCGTACGGCAGCCGCGGGCGGCCGAGGGGA
CCGGGCCAGGGCCGGGGGCGGCGGCCGAGCCGCGGTAGCGGCGGCGGGAGGGGCGGCCTGAGGGCGGACGG
GCGGGCGCCCGGGTTGCGGGGGCTCGGTGCCGCTCCGCACTGCCGCGCGGTCTCGGCCCGCGCCATGAGTGG
CGGCGGCGGCGGAGGGGGCTCGGCGCCAGTCGCTTCGCCGACTACTTTGTCTATCTGCGGACTGGACACGGAGAC
CGGGCTGGAGCCGGACGAGCTGTGCGCATTATGCCAGTACATACAGGCTTCTAAAGCCAGGGATGGTGCCAGCCC
TTTCATTTCAAGTACGACTGAAGGAGAAAATTTTGAAGCAGACACCATTGAGAAGAACATTCAAATCTAAGGTCCT
TGCACGATATCCTGAGAACGTAGAATGGAATCCCTTTGACCAAGATGCAGTAGGAATGCTATGTATGCCGAAAGG
GCTGGCATTCAAGACCCAGGCTGATCCAGGGAGCCCCAATTCCATGCCTTTATTATCACAAGGGAGGATGGCTC
TCGGACATTTGGGTTTGCCCTCACATTTTATGAAGAGGTGACTAGCAAGCAGATCTGCAGTGCAATGCAGACCCT
CTACCACATGCACAATGCTGAGTATGATGTCTACATGCTCCCCCTGCTGATGACAGAGACCAGAGCAGCATGGA
GGATGGTGAAGACACTCCTGTGACCAAATGCAGCGCTTCAACTCCTATGACATTAGCCGGGACACTCTCTACGT
CTCTAAGTGCACTGCGCTCATCACCCCATGTCTTTTCATGAAGGCATGTCGGAGCGTGCTGGAGCAACTCCACCA
GGCAGTCACTTCACCTCAGCCCCCTCCACTGCCCCCTTGAGAGCTACATATACAACGTACTCTACGAGGTGCCGCT
CCCACCTCCTGGCCGGTCTTGAAGTTTCTGGGGTCTATGGGCCAATAATCTGCCAGAGACCAAGTACCAATGA
GCTTCCCCTATTTGACTTTCTGTCAAAGAGGTTTTTGAAGTCTCGGGGTGGAGAATGTGTTTCAGCTTTTTAC
TTGTGCCCTTCTGGAGTTTCAAATCCTGCTCTACTCACAGCATTACCAGAGACTGATGACTGTGGCGGAGACGAT
TACAGCTCTCATGTTTCCCTTTCAGTGGCAGCATGTCTATGTCCCTATTCTCCAGCTTCTCTCCTGCATTTCTT
AGATGCTCCTGTTCCATACCTGATGGGTTTGCATTCCAATGGCCTGGATGACCGGTCAAAGCTGGAGCTGCCTCA
AGAGGCTAACCTCTGCTTTGTGGACATTGACAACCACTTCATTGAGTTGCCAGAGGACTTGCCACAGTTCCCCAA
CAAATTGGAGTTTGTCCAGGAAGTCTCTGAGATTCTCATGGCATTGGAATTCCCCCTGAAGGGAATCTTCATTG
CAGTGAGAGTGCCCTCAAGCTGAAGAGGCTGCGGGCCTCTGAGCTTGTCTCGGACAAGAGGAATGGGAACATTGC
TGGCTCCCCTTTGCATTCTACGAGCTTCTTAAGGAGAATGAAACTATTGCCCGGCTGCAAGCCTTGGTCAAGAG
AACTGGGGTGAGCCTGGAAAAGTTGGAAGTGCCTGAAGACCCAGCAGCAATAAGGATCTCAAAGTTTCAGTGTGA
TGAAGAAGAACTCAGGATTTACCAGCTAAACATTGAGATCCGGGAAGTTTTTGCAAATCGTTTTCACTCAGATGTT
TGCAGATTATGAGGTGTTTGTATCCAACCCAGCCAGGATAAGGAATCCTGGTTTTACCAACAGGGAGCAAATGCA
AACTTTGATAAAGCATCTTTTCTGTGATCAGCCTGAGCCCTACCTGCCCTTCTCTCAAGATTCTTGAGAC
CCAGATGTTTGCATCTTTTCATTGACAACAAAATAATGTGTGATGATGATGATAAAGACCCTGTACTCCGGGT
ATTTGATTCCCGAGTTGACAAGATCAGGCTGTTGAATGTTTCGGACACCTACTCTCCGTACATCCATGTACCAGAA
GTGTACCACCTGTGGATGAAGCAGAGAAAAGCAATTGAGCTGCGTCTGGCAAAAATTGACCATACTGCAATTCACCC
ACATTTACTTGACATGAAGATTGGACAAGGGAAAATATGAGCCGGGCTTCTTCCCTAAGCTGCAGTCTGATGACT
TTCCACTGGGCCAGCCAGCAACAAGTGGACGAAAAGGAATGCCCTGCCAGTGGAGGCGGAAAGATCGGCAGAA
GCAGCACACAGAACACCTGCGTTAGATAATGACCAGAGGGAGAAGTACATCCAGGAAGCCAGGACTATGGGCAG
CACTATCCGCCAGCCCAAACCTGTCCAACCTCTCTCCATCAGTGATTGCCAGACCAATTGGAAGTTTGTAGAGGG
CCTGCTGAAGGAATGCCGCAATAAGACCAAGAGGATGCTGGTGGAAAAGATGGGCCGAGAAGCTGTGGAGCTAGG
GCATGGGGAGGTGAACATCACAGGGGTGGAAGAGAACACCTGATTGCCAGCCTTTGTGATCTCCTGGAAAGGAT
CTGGAGTCATGGACTACAAGTGAACAGGGGAAAATCAGCCTTATGGTCCCACCTGTTACATTATCAGGACAACCG
GCAGAGAAAACCTCACATCAGGAAGCCTCAGTACCTCAGGAATACTTCTTGATTGAGAACGTAGGAAGTCTGATGC
CAGCTCACTCATGCCTCCCCTGAGGATCTCCCTGATTGAGGATATGAGGCACATCCAGAACATCGGGGAGATCAA
GACTGATGTGGGATAGGCAGAGCATGGGTGCGACATGTATGGAAAAAGTTACTTTTCAGACACCTGAGCAGCTC
TCTCAGACATGAGCTCACAAAAAGTTATATAAGCGCTATGCCTTCTGCGCTGTGATGACGAGAAGGAGCAGTTC
CTCTATCACCTCCTGTCTTTCAATGCCGTCGATTACTTTTGCCTTACCAATGTCTTACAACTATCCTGATCCCG
TACCACATTTCTGATCGTACCAAGCAAGAAGCTGGGGGGCTCCATGTTCACTGCCAACCCTATGGATCTGTATATCA
GGAGAATTGGGTGAGACACAGATCATGCAGATTTCCAGGAATGTGCTAGAGATGACCTTCGAGTGCCAGAACTTG
GGGAAGCTTACTACTGTCCAGATTGGCCATGATAACTCTGGGCTGTAATGCAAATGGCTGGTGGAGATGTGATG
GTCAGGAATGAGATCACAGGACATACCTACAAGTTCCCGTGTGGCCGGTGGTTAGGGAAGGGCATGGATGATGGA
AGCCTGGAGCGGATCCTAGTTGGGGAGCTGCTCACATCCAGCCTGAGGTGGATGAGAGCCATGCCGGACCCCG
CCGCTGCAGCAGTCCCCCAGTGTATCCGGAGGCTTGTATACCATCTCACCCAACAACAGCCCAAGCTGAACACT
GGGCAGATCCAGGAGTCCATCGGGGAGGCAGTCAATGGCATTGTGAAGCACTTCCATAAGCCTGAGAAAGAGCGA

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FIGURE 3157B

GGCAGTCTGACGCTGTTGCTCTGTGGAGAGTGTGGCCTTGCTCTCGGCCTTGGAACAGGCTTTCCAGCATGGATT
AAATCGCCCCGGCTCTTCAAAAATGTCTTCATTTGGGATTTCTGGAAAAAGCACAAACCTATTATGAGACATTA
GAGAAGAATGAAGTAGTCCCTGAGGAAAACCTGGCATAACAAGAGCCCGGAACCTTCTGCCGATTTGTCACTGCAATC
AACAACTACTCCCCGGAACATCGGCAAGGATGGCAAGTTTCAGATGCTGGTGTGCTTGGGAGCCAGAGATCACCTC
CTACACCACTGGATTGCCCTGCTGGCTGACTGCCCCATCACTGCACACATGTATGAGGATGTGGCACTGATCAAA
GACCATACTTGTCAATTCTTTGATTCTGTGTGCTGCAGACATTGCAGGAGTTCAACATCACGCTGGAGACGTCC
CTTGTCGAAGGGCATCGACATCTGACCTCCCAGCACCAGCCAGCAGCAGGACTGAGAAAGACTCACCTGCAGCTC
TGACCTTTTTTCCCAAAGGGACTTAAGCGATTGTGCAGGAGTAGGAGACAAAATGTACACTCACTGTAAAAAGAA
AACTAGAGGATTTTTGGAATAAATAATCTATTTTAGAGTTTATTTGCTGATTTGCTTTTTACACACTTTCATGTG
AAAGAGTGATAGGGAGAGGGAGCGAGGCTGGTGCCGCTTATTTTGAAGCTGGTGCCCTCCCTCGCCGTGGCCACA
TGCTGGAACCTGAGGCCTCCCTGGACTGAGCCTGTGCACTGCGTGCGGGACAGTTATGTTTCTTGCCCCGTGCG
ATTAATGAGGCCCTTCCACATCATTTTTAACTAATGTTTTCTATATTAACATTATTATGGATATTTGGCTTTC
ATAGGCCACACACAGGTGTGCTGCGCGGGAAGCCCCATGCTCCAATCAAAGGGATTTTATAGTAGTGCCTCTAAGC
AAGCACCGATGAGTCAGTCCCACGTATTTTCTTTTTTGTGAGTATTGTTTGGGAAGGAGACATGCCGGGATGTGT
CATCGTGCCAAATACCACATTTCTGTTGGCACAGTTTCACAGAAGTAAACATAAGCATGTTTTAACAGGTTTTT
CTTTTCTTTTTTCTTTTTTAAATGTTTTATTTATTTAACCCGCCATTGTGTGTTTTTAAGTATTTTCTTTTTT
AAGGAAAGGAAAAGCTTGTCACAATCTAACTGGCTATGTTATTATTATTAATTTATGTTTTGCAACTTAGAAAC
CAGCTACAGTATGGCCCACTTAATAAAACACCTGAAAC

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FIGURE 3158

MSGGGGGGSAPSRFADYFVICGLDTETGLEPDELSALCQYIQASKARDGASPFISSTTEGENFEQTPLRRTFKS
KVLARYPENVEWNPFDQDAVGMLCMPKGLAFKTQADPREPQFHAFIITREDGSRTFGFALTFYEEVTSKQICSAM
QTLYHMHNAEYDVLHAPPADDRDQSSMEDGEDTPVTKLQRFNSYDISRDTLYVSKCICLITPMSFMKACRSVLEQ
LHQAVTSPQPPPLPLESYIYNVLYEVPLPPPGRSLKFSGVYGPIICQRPSTNELPLFDFPVKEVFELLGVENVFQ
LFTCALLEFQILLYSQHYQRLMTVAETITALMFPFQWQHVVYPILPASLLHFLDAPVPYLMGLHSNGLDDRSKLE
LPQEANLCFVDIDNHFIELPEDLPQFPNKLEFVQEVSEILMAFGIPPEGNLHCSESASKLKRLRASELVSDKRNG
NIAGSPLHSYELLKENETIARLQALVKRTGVSLEKLEVREDPSSNKDLKVQCDEEELRIYQLNIQIREVFANRFT
QMFADYEVFVIQPSQDKESWFTNREQMNFQDKASFLSDQPEPYLPFLSRFLETQMFASFIDNKIMCHDDDDKDPV
LRVFSRVDKIRLLNVRTPTLRTSMYQKCTTVDEAEKAIELRLAKIDHTAIHPHLLDMKIGQGYEPGFFPKLQS
DVLSTGPASNKWTNRNAPAQWRRKDRQKQHTHLRLDNDQREKYIQEARTMGSTIRQPKLSNLSPSVIAQTNWKF
VEGLLKECRNKTKRMLVEKMGREAVELGHGEVNITGVEENTLIASLCDLLERIWSHGLQVKQKSALWSHLLHYQ
DNRQRKLTSGSLSTSGILLDSERRKSDASSLMPPLRISLIQDMRHIQNIGEIKTDVG

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FIGURE 3159

CGCCATCTTCCAGTAATTCGCCAAAATGACGAACACAAAGGGAAAGAGGAGAGGCACCCGATATATGTTCTCTAG
GCCTTTTAGAAAACATGGAGTTGTTTCTTTGGCCACATATATGCGAATCTATAAGAAAGCTGATATTGTAGACAT
CAAGGGAATGGGTACTGCTCAAAAAGGAATGCCCCACAAGTGTTACCATGGCAAACTGGAAGAGTCTACAATGT
TACCCAGCATGCTGTTGGCATTGTTGTAAACAAACAAGTTAAGGGCAAGATTCTTGCCAAGAGAATTAAGGTGCG
TATTGAGCACATTAAGCACTCTAAGAGCCGAGATAGCTTCCTGAAACACGTGAAGGAAAATGATCAGAAAAAGAA
AGACGCCAAAGAGAAAAGGTACCTGGGTTCAACTAAAGCGCCAGCCTGCTCCACCCAGAGAAGCACACTTTGTGAG
AACCAACGGGAAGCAGCCTGAGCTGCTGGAACCTATTTCTATGAATTCATGGCATAATAGGTGTTAAAAAAA
AATAAAGGACCTCTGGGCTGTAAAAAAAAAAAAAAAAAATTAAAAAAGAAAAAAAAAAAAAAAAAGAAAAGAAAAAA
AA

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FIGURE 3160

MTNTKGKRRGTRYMF SRPFRKHGVVPLATYMRIYKKADIVDIKGMGTAQKGMPHKCYHGKTGRVYNVTQHAVGIV
V NKQVKGKILAKRIKVRIEHIKHSKSRDSFLKHVKENDQKKKDAKEKGTWVQLKRQPAPPREAHFVRTNGKQPEL
LEPISYEFMA

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FIGURE 3161A

CGCGAGGTTGAGGGGCGTCCGAGGCGCGGAGGGGCTGGCTGGGCAGGAGGGGTTGGCGGGGCAGCAGGGCCGCGG
CCATGGGGAGCTTGAAGGAGGAGCTGCTCAAAGCCATCTGGCACGCCTTCACCGCACTCGACCAGGACCACAGCG
GCAAGGTCTCCAAGTCCAGCTCAAGGTCTTTCCATAACCTGTGCACGGTGCTGAAGGTTCCCTCATGACCCAG
TTGCCCTTGAAGAGCACTTCAGGGATGATGATGAGGGTCCAGTGTCCAACCAGGGCTACATGCCTTATTTAAACA
GGTTTCATTTTGGAAAAGGTCCAAGACAACCTTTGACAAGATTGAATTCAATAGGATGTGTTGGACCCTCTGTGTCA
AAAAAAACCTCACAAAGAATCCCCTGCTCATTACAGAAGAAGATGCATTTAAAATATGGGTTATTTTCAACTTTT
TATCTGAGGACAAGTATCCATTAATTATTGTGTGAGAAGAGATTGAATACCTGCTTAAGAAGCTTACAGAAGCTA
TGGGAGGAGGTTGGCAGCAAGAACAATTTGAACATTATAAAATCAACTTTGATGACAGTAAAAATGGCCTTTCTG
CATGGGAACCTATTGAGCTTATTGGAAATGGACAGTTTAGCAAAGGCATGGACCGGCAGACTGTGTCTATGGCAA
TTAATGAAGTCTTTAATGAACCTATATTAGATGTGTTAAAGCAGGGTTACATGATGAAAAAGGGCCACAGACGGA
AAACTGGACTGAAAGATGGTTTGTACTAAAACCCCAACATAATTTCTTACTATGTGAGTGAGGATCTGAAGGATA
AGAAAGGAGACATTCTCTGGATGAAAATTGCTGTGTAGAGTCCTTGCTGACAAAGATGGAAGAAATGCCTTT
TTCTCGTAAAATGTTTTGATAAGACTTTTGAAATCAGTGTTCAGATAAGAAGAAGAAACAGGAGTGGAATTCAAG
CCATTCTACTATTCTCTGTGTAAGCTGGGCAGCCCTCCACCACACAAAGAAGCCCGCCAGCGTCGGAAAG
AACTCCGGAAGAAGCAGCTGGCTGAACAAGAGGAAGTGGAGCGACAAATGAAGGAAGTCCAGGCCGCCAACGAAA
GCAAGCAGCAGGAGCTGGAGGCCGTGCGGAAGAACTGGAGGAAGCAGCATCTCGTGACAGAGAAGAGGAAAAGA
AACGCCCTCAGACTCAAGTGAACCTCAGGCCAGGTTACAGCACAGAGCTGGAAAGAGAGAAGCTTATCAGACAGC
AGATGGAAGAACAGGTTGCTCAAAAGTCTCTGAACTGGAACAGTATTTACAGCGAGTACGGGAGCTGGAAGACA
TGTACCTAAAGCTGCAGGAGGCTCTTGAAGATGAGAGACAGGCCCGGCAAGATGAAGAGACAGTGCAGGAAGCTTC
AGGCCAGGTTGTTGGAGGAAGAGTCTTCCAAGAGGGCTGAACTAGAAAAGTGGCACTTGGAGCAGCAGCAGGCCA
TTCAGACAACCGAGGCGGAGAAGCAGGAGTTGGAGAATCAGCGTGTCTGAAGGAACAGGCCCTGCAGGAGGCCA
TGGAGCAGCTGGAGCAGCTTGAATTAGAACGGAAGCAAGCACTTGAGCAGTACGAGGAAGTTAAAAAGAAGCTGG
AGATGGCAACTAATAAGACCAAGAGCTGGAAGGACAAAGTGGCCCATCATGAAGGATTAATTCGACTGATAGAAC
CAGGTTCAAAGAACCCTCACCTGATCACTAACTGGGGACCTGCAGCTTTCACTGAGGCAGAACTTGAAGAGAGAG
AGAAGAACTGGAAAGAGAAAAAGACCACGGAGTGACTGAGCTTGCTGGCAGTCACGTCAGTTATGTAGATACTGC
ATGGCAGGAGAGCTTTACGCTAAAAGACAAAAAGAAACAGCTTTGGGGGCGGGCGTGGTGGCTCACGCCTGTAATC
CCAGCACTTTGGGAGGCCGAGGCGGGTGGATCACCTGAGGTCAGGAGTTCAAGAGCAGCCTGGCCAACCTGGTGA
AACCTGTCTCTACTAAAAATACAAAAAAATTAGCTGAGCGTGGTGGCGGGCGCCTGTAATCCCAGCTACTTGG
GAGGCTGAGGCAGGAGAACTCACTTGAACGTGGGAGGCGGAGGTTGCAGCGAGCTGAGATCATGCCGTTGTACTCC
AGCTTGGGCAACAGAGTGAGACTCCATCTCAAAACAAAACAAAACAAAACAAAAAACCCGGCTTTGCTG
CTTTAACTCTTCTTCTTCTGTGCCTCTCTAAGTGGGTGAGTATCTTAAGGAAGCCTTCTTATTTATCTTCTTG
CAAACAAGGGTTACCTGAAAAGAAAAAAAGTCAACATTGTCAAGCTGTTTGTCTTCTTTTGAACAT
CACCTTCTGAAATTTGTCTTTTAGCTCTCTCAGATTCTTCCCAAATGAGGCAGGGTGCAGACAGCACAGTCAGC
TCTGCAGAGTTTGGAGGGGCTCACTGCCACTGGGTACTCAGAACCTCTGTGGACTGGATGTCAGCTCTTTCTTT
GGCAGCGTGTTCCTTTTCCGAGTATGTGCTGTTAACTAGATTGGCCGGTTTCGCTTTCCATTTCTGACACTTG
ACATGGAATGCCCTTTGACCATTTGGTGTCTGACAGAGAAGTCATGGAGTCATTGCCATTTCTGTTGGCCTTTT
GGAATGTGATCCTGTTAGTAGAGGTTTTCTAGCTTCTACTAAGATATTTCTTTCCCTAACCATCATACACTTGGC
ATGTTTCATTCCCATCTCTTTTCCCTCACCTTAAAGGAGACTACCCCTTTGCCCATATTGTCAACCTAATTTT
CTCTCGTACTCTCTCTAGTGAATGATGTGCTACCAAGTATATGCCAGGCTGTGAGAGGATTATACTGAGTAGTAG
AAAGAAGCTAATTTGAAATAAAAATTTTGTATAATTAAGAAAGCAGATTAGATGCACATGGTCAACAGGAAGT
TGACTGTATGTCTGCTAGTTAGATTCAAAACATCATAAAGATGATAGCATGTCAATATATTAGCCTAGCCATTAT
GTTAGCCTTTGTTAGGTGGGCAGCTTTTCTGCTTTTCCCTTCTCTGTGGTGACAACGGAGGAAATATCCAACA
GAAATACGTCTAACAGGGGAAATTTGGGATCATAGTTTATATGCATCTGATTTGAAAGGAGTATTGAGGAAGGTTT
CATATATGATCTATCTTTGGATTAAAAAGAACATTTATGAAATCAAGCCTTCTAACACTAGTTATAATTGAGAAG
CAACAGTAACCTCCGTGGACAGCAATCAAGCTTAAATTTGTAATAAATATGGGGATAATTAGTTGTTGCAAAAA
AAGGGCAGAATTCAGTAGAATAAAGTCTTTTCTCTTACAGGATTAATAATGAGGACAGAGAACCTCAGGTGTTCT
TATGCTAGTGCTGTGCTGAGTGACATACTAAGAAAGCAATTCCAAATAGATGTATACATCTAGAGAGAGTGGTATTA
GAGATTGAGTGATGTATTTATTTACATGAGAGGAACTGGAATATAATCCCATAAATTATCACCTTTTATGACT

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FIGURE 3161B

GGAAAATATTTGCCAATGAAGAAATGGTCTGTAGGTATTTGTCTTAAGATTTTTGGCTGTTTAATAAAAAATGTAA
CTTTAACGGTTTCTTATAGTTGCCTTTATAAAGTGATTGTCTAAAATATTTTTGTATCATGTGCCTTTGAAATT
TGACAGCTGATTTGGGTGTTGGATTTCTGCCAGCCATTTATCAGTATTATCATTTTATTTCAGTAGCTGGCAGGT
GTATTAGACCAACGAGACTTAGGTAAGGAATGGAACCTTTCTGTGGTTTGAAGTGCACATTACACCAGAAGACTC
CAGTATCCCTCATTCCAGAATGAGGAAAAAGTATTCTACAAAGAACCTAATCACCTCTGTGAAATCTATGGGATG
GAAACAGTGTGGCCTTAGGAGTCAAATAGTCTCTGCATGGTGGGGAGGATCATGATGGAATATGTGAATTTCTAC
TTCTAGAAGTTGTGAAATAGGTCTGCACTTTTGCAGAATGTCTTCTTTAAACCTGGCTTATTCCACAGCTGTA
GCTGATAACATGACCTGGGGCTTAGCTGCTCTAGCCCTGGGTCTTGGAGACCTCACACTGCCTGGCCCCCTGGCC
ATCCACCTAAGGACTGCCTGCTTTCTGGTCACATGTGGACCTTGATACGACTAAGCGGTTACATATGTGGTTGTG
CAAAAGCTTTCTGTTTAAATGCATAGTGTACCGATTTACATCTTGGTTTTTCAGTGGCACTATGTCTAGGAGGCAA
TATCCTTTTAAACAGTGCTTTGGCTAAGATAGATACTTGTGAATCAAAGATAGCACAGAAATGAACCTAAGTATAT
CCCATTGGAATTATATTTTGATACTATTTAAAATGGTTTACCTGTTAAAGGGCCAACAGAACTCTTGGTTTTTA
CTTTTGTAATTACTGTACAGAAAATTTCAAGAGTGTGAGTGCTTGTATCAGGTGTTTTCTTAAATAAGTAGG
GATATGATCATTTACAGGAATTATATATGAAAAAGTTTTTGAAATGTATTTTGTGATGTGCTATGTTGAGGGG
AAACCAAATATTTATGATTTTAAACATTTCGTATGAAAACATTGTACAATGTAATATGCTCAACTTTCTCAATTT
TTTGCTAATTTTCTAAGATACATTAAAAATGTTTTATATTTTTTTTAAAGTAAATGGACCCAGTAAGAAAATT
AAAAATACCAGAACATACACTTT

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FIGURE 3162

MGSLKEELLKAIWHAFTALDQDHSGKVSQSOLKVLSHNLCTVLKVPHPVALEEHFRDDDEGPVSNQGYMPYLN
FILEKVQDNFDKIEFNRMCTLCVKKNLTKNPLLITEEDAFKIWVIFNFLSEDKYPLIIVSEEIEYLLKKLTEAM
GGGWQQEQFEHYKINFDDSKNGLSAWELIELIGNQFSGMDRQTVSMAINEVFNELILDVLKQGYMMKKGHRK
NWTERWFLKPNIIISYYVSEDLKDKKGDILLDENCCVESLPDKDGKKCLFLVKCFDKTFEISASDKKKKQEWIQA
IHSTIHLKLGSPPPHKEARQRRKELRKKQLAEQEELERQMKELOANESKQOELEAVRKKLEEAASRAAEEEEKK
RLQTQVELQARFSTELEREKLIQQMEEQVAQKSSELEQYLQRVRELEDMYLLQEALEDERQARQDEETVRKLQ
ARLLEEESKRAELEKWHLEQQQAIQTTEAEKQELNQRVLKEQALQEAMEQLEQLELERKQALEQYEEVKKKLE
MATNKTCSWKDKVAHHEGLIRLIEPGSKNPHLITNWGPAAFTAELEEREKNWKEKKTTE

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FIGURE 3163A

CAGCAGTGAGTCGGAGCTCTATGGAGGTGGCAGCGGGTACCGAGTGGCGGCTGCAGCAGCGACTCCTCTGAGCTG
AGTTTGAGGCCGTCCCCGACTCCTTCTCCCCCTTCCCTCCCCCTTTTTTTTGTTCGGTTCCTTCCCTC
CCTTCCCTATCCCCGACGACCGGATCCTGAGGAGGCAGCTGCGGTGGCAGCTGCTGAGTTCTCGGTGAAGGTATT
TCATTTCTCCTGTCCCCCTCCCCACCCCATCTATTAATATTATTCTTTTGAAGATTCTTCGTGTCAAGCC
GCCAAAGTGGAGAGTGCATTGCAGAAGGGGGTGTCTCTGTTTCAGTGCTTCTTCGGGCGGAGGAGGAAGTAGG
GGTGCACCTCAGCACTATCCCAAGACTGCTGGCAACAGCGAGTTCTTGGGAAAACCCAGGGCAAAACGCTCAG
AAATGGATTCTTCGACGAAGCACTAGACGAGATGACAACCTCCGACGAAACAACCTCCGCAACGAAAAAGACGA
CATGATGCAATCTTCAGGAAAGTAAGAGGCATACTAAATAAGCTTACTCCTGAAAAGTTTGACAAGCTATGCCTT
GAGCTCCTCAATGTGGGTGTAGAGTCTAAACTCATCCTTAAAGGGGTCACTGCTGATTGTGGACAAAGCCCTA
GAAGAGCCAAAGTATAGCTCACTGTATGCTCAGCTATGTCTGCGATTGGCAGAAGATGCACCAAACTTTGATGGC
CCAGCAGCAGAGGGTCAACCAGGACAGAAGCAAAGCACCACATTAGACGCCTCCTAATTTCCAAATTACAAGAT
GAATTTGAAAACCGAACTAGAAATGTTGATGTCTATGATAAGCGTGAAAATCCCCTCCTCCCCGAGGAGGAGGAA
CAGAGAGCCATTGCTAAGATCAAGATGTTGGGAAACATCAAATTCATTGGAGAGCTTGGCAAGCTTGATCTTATT
CACGAATCTATCCTTCATAAGTGCATCAAAACACTTTTGGAAAAGAAGAAGAGAGTCCAACCTCAAAGATATGGGA
GAGGATTTGGAGTGCCTCTGTGAGATAATGAGGACAGTGGGACCTAGATTAGACCATGAACGAGCCAAGTCTTA
ATGGATCAGTACTTTGCCCCAATGTGCTCCTTGATGTTAAGTAAGGAATTGCCAGCAAGGATTTCGTTTCTCTGCTG
CAGGATACCGTAGAGTTGCGAGAACACCATTTGGGTTCTCGCAAGGCTTTTCTTGACAAATGACCAAAAGACGATC
AATCAAATTCGTCAAGATGCAGTAAAGATCTAGGGGTGTTTATTCTCTGCTCCTATGGCTCAAGGGATGAGAAAT
GACTTCTTTCTGGAGGGACCGTTTCATGCCACCCAGGATGAAAATGGATAGGGACCCACTTGGAGGACTTGCTGAT
ATGTTTGGACAAATGCCAGGTAGCGGAATTGGTACTGGTCCAGGAGTTATCCAGGATAGATTTTACCCACCATG
GGACGTCATCGTTCAAATCAACTCTTCAATGGCCATGGGGGACACATCATGCCTCCACACAATCGCAGTTTGG
GAGATGGGAGGCAAGTTTATGAAAAGCCAGGGGCTAAGCCAGCTCTACCATAACCAGAGTCAGGGACTCTTATCC
CAGCTGCAAGGACAGTGAAGGATATGCCACCTCGGTTTTCTAAGAAAGGACAGCTTAATGCAGATGAGATTAGC
CTGAGGCCTGCTCAGTCGTTCTTAATGAATAAAAATCAAGTGCCAAAGCTTCAGCCCCAGATAACTATGATTCTT
CCTAGTGACAACCACCACGCACTCAAACACCACCTCTGGGACAGACACCTCAGCTTGGTCTCAAAACTAATCCA
CCACTTATCCAGGAAAAGCCTGCCAAGACCAGCAAAAAGCCACCACCGTCAAAGGAAGAACTCCTTAAACTAACT
GAACTGTTGTGACTGAATATCTAAATAGTGGAATGCAATGAGGCTGTCAATGGTGTAAGAGAAATGAGGGCT
CCTAAACACTTTCTTCTGAGATGTTAAGCAAAGTAATCATCTGTCACTAGATAGAAGCGATGAAGATAAAGAA
AAAGCAAGTTCTTTGATCAGTTTACTCAAACAGGAAGGGATAGCCACAAGTGACAACCTTCATGCAGGCTTTCTCTG
AATGTATTGGACAGTGTCCCAAACCTGGAGGTTGACATCCCTTTGGTGAAATCCTATTTAGCACAGTTTGCAGCT
CGTGCCATCATTTTCAGAGCTGGTGAGCATTTCAGAACTAGCTCAACCACTAGAAAAGTGGCACCCATTTTCTCTC
TTCTACTTTTGCTTTCAGCAGTTAGCTAAATTACAAGATCGAGAATGGTTAACAGAACTTTTCAACAAAGCAAG
GTCAATATGCAGAAAATGCTCCCAGAAATTGATCAGAATAAGGACCGCATGTTGGAGATTTTGAAGGAAAGGGA
CTGAGTTTCTTATTTCCACTCCTCAAATTGGAGAAGGAACGTTGAAGCAAATAAAGTTGGATCCATCCCCTCAA
ACCATATATAAATGGATTAAAGATAACATCTCTCCCAAACCTCATGTAGATAAAGGATTTGTGAACATCTTAATG
ACTAGCTTCTTACAGTACATTTCTAGTGAAGTAAACCCCCCAGCGATGAAACAGATTTCATCCTCTGCTCCTTCC
AAAGAACAGTTAGAGCAGGAAAAACAACCTACTACTATCTTTCAAGCCAGTAATGCAGAAATTTCTTCATGATCAC
GTTGATCTACAAGTCAGTGCCCTGTATGCTCTCCAGGTGCACTGCTATAACAGCAACTTCCCAAAAGGCATGTTA
CTTCGCTTTTTTGTGCACTTCTATGACATGGAAATTATTGAAGAAGAAGCTTCTTGGCTTGAAAGAAGATATA
ACCCAAGAGTTTCCGGGAAAAGGCAAGGCTTTGTTCAGGTGAATCAGTGGCTAACCTGGTTAGAACTGCTGAA
GAAGAAGAATCAGAGGAAGAAGCTGACTAAGAACCAGCCAAAGCCTTAAATTGTGCAAAACATACTGTTGCTAT
GATGTAACCTGCATTTGACCTAACCACTGCCGAAATTCATTCCGCTGTAATGTTTTACAAATTTTAAAGCAGAAG
CACGTCAGTTAGGATTTCTTCTGCATAAGGTTTTTTGTAGTGAATGTCTTAATCATAGTCTACCATCAAATA
TTTTAGGAGTATCTTAAATGTTTAGATAGTATATTAGCAGCATGCAATAATTACATCATAAGTTCTCAAGCAGAG
GCAGTCTATTGCAAGGACCTTCTTTGCTGCCAGTTATCATAGGCTGTTTTAAGTTAGAAAAGTGAATAGCAACAC
TGAATACGTAGAAATGCACCTTGTCTAGTAATACTTGAGTTGTTGCAATATTTGATTATCCATTGGTTGTTAC
AGAAAAATTTCTTAACTGTAATTGATGGTTGTTGCCGTAATAGTATATTGCCTGTATTTCTACCTCTAGTAATGGG
CTTTATGTGCTAGATTTTAAATATCCTTGAGCCTGGGCAAGTGCACAAGTCTTTTTTAAAGAAACATGGTTTACTT

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FIGURE 3163B

GCACAAACTGATCAGTTTTGAGAGATCGTTAATGCCCTTGAAGTGGTTTTTGTGGGTGTGAAACAAATGGTGAG
AATTTGAATTGGTCCCTCCTATTATAGTATTGAAATTAAGTCTACTTAATTTATCAAGTCATGTTTCATGCCCTGA
TTTTATATACTTGTATCTATCAATAAACATTGTGATACTTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 3164

VE S A I A E G G A S R F S A S S G G G S R G A P Q H Y P K T A G N S E F L G K T P G Q N A Q K W I P A R S T R R D D N S A A N N S A N E K E R H D
A I F R K V R G I L N K L T P E K F D K L C L E L L N V G V E S K L I L K G V I L L I V D K A L E E P K Y S S L Y A Q L C L R L A E D A P N F D G P A
A E G Q P G Q K Q S T T F R R L L I S K L Q D E F E N R T R N V D V Y D K R E N P L L P E E E E Q R A I A K I K M L G N I K F I G E L G K L D L I H E
S I L H K C I K T L L E K K K R V Q L K D M G E D L E C L C Q I M R T V G P R L D H E R A K S L M D Q Y F A R M C S L M L S K E L P A R I R F L L Q D
T V E L R E H H W V P R K A F L D N G P K T I N Q I R Q D A V K D L G V F I P A P M A Q G M R S D F F L E G P F M P P R M K M D R D P L G G L A D M F
G Q M P G S G I G T G P G V I Q D R F S P T M G R H R S N Q L F N G H G G H I M P P T Q S Q F G E M G G K F M K S Q G L S Q L Y H N Q S Q G L L S Q L
Q G Q S K D M P P R F S K K G Q L N A D E I S L R P A Q S F L M N K N Q V P K L Q P Q I T M I P P S A Q P P R T Q T P P L G Q T P Q L G L K T N P P L
I Q E K P A K T S K K P P P S K E E L L K L T E T V V T E Y L N S G N A N E A V N G V R E M R A P K H F L P E M L S K V I I L S L D R S D E D K E K A
S S L I S L L K Q E G I A T S D N F M Q A F L N V L D Q C P K L E V D I P L V K S Y L A Q F A A R A I I S E L V S I S E L A Q P L E S G T H F P L F L
L C L Q Q L A K L Q D R E W L T E L F Q Q S K V N M Q K M L P E I D Q N K D R M L E I L E G K G L S F L F P L L K L E K E L L K Q I K L D P S P Q T I
Y K W I K D N I S P K L H V D K G F V N I L M T S F L Q Y I S S E V N P P S D E T D S S S A P S K E Q L E Q E K Q L L L S F K P V M Q K F L H D H V D
L Q V S A L Y A L Q V H C Y N S N F P K G M L L R F F V H F Y D M E I I E E E A F L A W K E D I T Q E F P G K G K A L F Q V N Q W L T W L E T A E E E
E S E E E A D

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FIGURE 3165

AGCTCTTTGTTCTCCAAGCAGGAAGGCGGCCCTCCTGCCACCCGCCCTCCAAGCGGGCCCCCTCCTGCACCAT
AAATCCCCCGGGACTGACAACCGCCTCGCCACGGCCTCCTCTGCTGACAAAAGGGGCAGAAATCATCACTCTCT
CTTTCTCCTCCCCGACGAAGGGCAGCCCCCTGCCGACTCCAGGTCTACACACCTCCCCGCCGGGAGGCCAGGCTCCG
GGACGCTGCGGTTCCCTGGTCCCGGCCAACGGCCTGGCCTTCCCTGCCGGCCCGCGTGCCTCCCGCCACGGCG
CTAGCGGTCCGAGCCACGCTCCCTCGCCGTCCGAGCACAGCCGTGCCTCGGTCCGCCACGGCCTCGTCCCTGCAG
GCGTGGGCCATCCGGCCATGACCGCACGGCGGCCTGGCCAACACTGACGTTTTCTTCTACTCCGTGAGCAACAG
GAAGAGAGAAACAAAAGCCAAGACTTTCCAGGTATCTGAAGCGCAGAGGAAATGCTAAAAAAGGGTCGCCCCACCC
GGCTCCGCTGCGGCCGCCATTTTGTACCACTCGAGAAGAAGCGACCAGGGACGGCGGCCATTTTAGAGCGCTCC
ACTCGGCGGCGGCAGCGGCTCAACTCACCTTCACCGAGAACTCAGCAGCTGCCACCGCAGCTGCCTCCTCAGGAT
CCGGTCGTCGGGGATAGGGAAGGGAGGGGAAAGGGGAACGGAACAAAAAAGGGGGAGGGAAGGGGGAGGAA
GGAGTCGGGGACGGCCTCAAACCTAGCTCAGAGGAGTCGCTGCTGCAGCCGCCACTCGGTACCCGCTGCCACCTC
CATAGAGCTCCGACTCACTGCTGGCGCTAAGGCGTGTCTGAAGCCGAACCTATCACTCTTGGGGCAGCCGAACCC
ACCAGAGTCTCCCCGAATGGCTCCTTCGCCGCCCAATCAGCGGCCCGGTTGCCGTCTGCCACCAATCCGCGCAGG
GCAGCGAGGAGGAGCCACAGGGCTGAGCTCGGTTGCGGCGCAGCCCCGCCGAGTGCAGCAAAGCCATATTCGCGA
AGTCTCTGAGGCTGAGCCAGTGGCGTAAGGGGCGCCGAGCGCTGTCGAGATGAGGGTTGCGTGCGTAAAGCCGGA
GAGCCCTTTTGAGTCTGCGTTGGCGTGGCTGCTGCTTCTTGCTCCAGTCCCTTTGTTCACTGAGTCCATATGCCA
TGCTCCAGTTGTATCATCCCTTTTCCCTCGACCTCGTTTTCTCACCGGGAATATGGGAAGAAAACGCACCCTTA
CCTCCCCGAACCTGTGCGTGGCGAGTGAGCATTGCTTTTTCTTGGCGCCCCCTTGGAGCTGTGGCTGCCCTCGCG
TGCTTGCCCTCTCCCGGGCTGAGCCCTTCGGGTTGAGGCCTTGGAGCCCCCGGGCGCAGCGCCGGGACACTACCC
GGCTCCAGGTCTTCGGCTTCGGCAGCCTTAGGGAACCCAGAAAGTAGTGGGGAGGAGGCGAGACGTGCGCCCGGA
TGCCAAAGGGGAGCTTCATTACGCTCCTTATTGGCCCCACCCCTGCAGAGTGAATGAGAAAGTGATGAAAGGAAG
GGGTTGATTTTCTTCGAACCGCACAGAAGAAGCTGCTTTTCCCATAGGAATGTCCGGCTGGCGGTCACCGAGGAA
AACACCTGTGTGTCAGACTTCGCGGGGTGTTTGGAGGATTTTGAATTGCTAGCTCCTGTTTTTTTTTTGTTTTT
GTTTGTTTAAAGTGCACGTAAACATTGTGAGTTGTGTATTTTCACTTTTAAAGGTTTACCATAAGAAATAGGA
TTAAGCTTTTCAAAGCCGGCAAGTTGAACTATTTATACTTACCAGGTAATGTATTGATGAGTACCTTATTCCATC
GTTTGCACATTGTAGCTATACTAAATGGAGTCATACTTCCATAAACTTAAACAACAAAAATGTCCTCCATCTCC
ATTTTAAATGTAGTACTTTTACAGTGTATAGTCAAAGGCAAGAATGTGTGTGTTTTTAAATGAATGACTTTTAA
AGTGTTCAAGAGGAGGAGGATTTTCAAAGACCCAACTTAACCTTTGATGTGTCAAACAGCTCTTGGTATTAG
AGCACCTGGTCTTAATACAATTTTCCGGAAAAATTGC

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FIGURE 3166

MRVACVKPESPFE~~S~~ALAWLLLLAPVPLFTESICHAPVVSSPFPSTSF~~S~~HREYGKKTHPYLPRTL~~C~~VASEHCF~~S~~WR
PLELWLPSRAWPLPGLSPSG

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FIGURE 3167

CGCGAGCCGGGACCACGCCGACCCAGCGTGCCAGGCCGAGGAAAGCGCGGGCGGCAGTCCGAAGACCCACCG
GGACTGAAAGAGAAGGACGAGGTCACTTCGGACGGGAGGGGCAAGCCAGCCATCCTGGGACCCAGGCGTGCAG
GTTCTCTTTGAGGGTATTCCACCCTGCAAAAAGCATGTATTATGGTCAGCTCTCAGCAAGGCCAGTAGCAGAGT
GGTAAAGGCCTTGGCCCTCCAAGGCTGGGAAAAGACAATGACAAGTCAAATCCAGACCTATGTTGTATGTTGGTC
TACTAGGTGACTGTCTCCTGGAAATGTTATGCAGCTCAGCAAGGTGAAGTTTCGAAATCAGTATGACAATGATGT
CACTGTTTGGAGCCCCAGGGCAGGATTCATCAAATTGAATATGCAATGGAAGCTGTTAAACAAGGTTTCAGCCAC
AGTTGGTCTGAAATCAAAAACCTCATGCAGTTTTGGTTGCATTGAAAAGGGCGCAATCAGAGCTTGCAGCTCATCA
GAAAAAATTCTCCATGTTGACAACCATATTGGTATCTCAATTGCGGGGCTTACTGCTGATGCTAGACTGTTATG
TAATTTTATGCGTCAGGAGTGTTTGGATTCCAGATTTGTATTCGATAGACCACTGCCTGTGCTCTCGTCTTGTATC
TCTAATTGGAAGCAAGACCCAGATACCAACACAACGATATGGCCGGAGACCATATGGTGTGGTCTCCTTATTGC
TGTTTATGATGATATGGGCCCTCACATTTTCCAAACCTGTCCATCTGCTAACTATTTTGACTGCAGAGCCATGTC
CATTGGAGCCCGTTCCCAATCAGCTCGTACTTACTTGGAGAGACATATGTCTGAATTTATGGAGTGTAATTTAAA
TGAAGTAGTTAAACATGGTCTGCGTGCCTTAAGAGAGACGCTTCCTGCAGAACAGGACCTGACTACAAAGAATGT
TTCCATTGGAATTGTTGGTAAAGACTTGGAGTTTACAATCTATGATGATGATGATGTGCTCCATTCTGGAAGG
TCTTGAAGAAAGACCACAGAGAAAGGCACAGCCTGCTCAACCTGCTGATGAACCTGCAGAAAAGGCTGATGAACC
AATGGAACATTAAGTGATAAGCCAGTCTATATATGTATTATCAAATATGTAAGAATACAGGCACCACATACTGAT
GACAATAATCTATACTTTGAACCAAAGTTGCAGAGTGGTGAATGCTATGTTTTAGGAATCAG

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FIGURE 3168

MFRNQYDNDVTWSPQGRIHQIEYAMEAVKQGSATVGLKSKTHAVLVALKRAQSELAAHQKKILHVDNHIGISIA
GLTADARLLCNFMRQECLDSRFVFDRLPVSRLVSLIGSKTQIPTQRYGRRPYGVGLLIAGYDDMGPHIFQTCPS
ANYFDCRAMSIGARSQSARTYLERHMSEFMECNLNELVKHGLRALRETLPAEQDLTTKNV SIGIVGKDLEFTIYD
DDDVSPFLEGLEERPQRKAQPAQPADEPAEKADPEMEH

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FIGURE 3169

CCTTTCGTTGCCTGATCGCCGCCATCATGGGTCGTATGCGTGCTCCTGAGAAGGGCCTGICCCAGTCGGCTTTAC
CCTATCGACGCAGCTTCCCCACTTGGTTGAAGTTGACATCTGACGACGTGAAGGAGCAGATTACAACTGGCCA
AGAAGGGCCTTACTCCTTCACAGATCGGTGTAATCGTGAGAGAATCACATGGTGTTGCACAAGTACGTTTTGGA
CAGGCAATCTCTACCATTTAATTAAGAAAGCAGTTGCTGTTCAAAGCATCTTGAGAGGAACAGAAAGGATAAGGA
TGCTAAATTCCATCTGATTCTGATAGAGAGCCAGATTCACCGTTTG

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FIGURE 3170

CGCCGCCATCATGGGTCGTATGCGTGCTCCTGAGAAGGGCCTGTCCCAGTCGGCTTTACCCCTATCGACGCAGCTT
CCCCACTTGGTTGAAGTTGACATCTGACGACGTGAAGGAGCAGATTTACAAACTGGCCAAGAAGGGCCTTACTCC
TTCACAGATCGGTGTAATCGTGAGAGAATCACATGGTGTTCACAAGTACGTTTTGTGACAGGCAATAAAAATTTT
AAGAATTCTTAAGTCTAAGGGACTTGCTCCTGATCTTCCTGAAGATCTCTACCATTTAATTAAGAAAAGCAGTTGC
TGTTCAAAGCATCTTGAGAGGAACAGAAAGGATAAGGATGCTAAATTCCATCTGATTCTGATAGAGAGCCAGATT
CACCGTTTGGCTCAATATTATAAGACCAAGCGAGTCCTCCCTCCCAGTTGGAAATATGAATCATCTACAGCCTCT
GCCCTGGTCGCATAAAATTTGTCTGTGTACTCAAGCAATAAAATGATTGTTTAACTAAAATAAAACAAAAACAAAA
ACAAAAAA

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FIGURE 3171

CGCTCTCCTTTTCGTTGCCTGATCGCCGCCATCATCGGTCGCATGCATGCTCCCGGGAAGGGCCTGTCCCAGTCGG
CTTTACCCTATCGACGCAGCGTCCCCACTTGGTTGAAGTTGACATCTGACGACGTGAAGGAGCAGATTTACAAAC
TGGCCAAGAAGGGCCTTACTCCTTCACAGATCGGTGTAATCCTGAGAGATTCACATGGTGTGCACAAGTACGTT
TTGTGACAGGCAATAAAATTTAAGAATTCTTAAGTCTAAGGGACTTGCTCCTGATCTTCCTGAAGATCTCTACC
ATTTAATTAAGAAAGCAGTTGCTGTTTCGAAAGCATCTTGAGAGGAACAGAAAGGATAAGGATGCTAAATTCCGTC
TGATTCTAATAGAGAGCCGGATTACCGTTTGGCTCGATATTATAAGACCAAGCGAGTCCTCCCTCCCAATTGGA
AATATGAATCATCTACAGCCTCTGCCCTGGTCGCATTAAATTTGTCTGTGTACTCAAGCAATAAAATGATTGTTTA
ACTA

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FIGURE 3172

MGRMHAPGKGLSQSALPYRRSVPTWLKLTSDDVKEQIYKLAKKGLTPSQIGVILRDSHGVAQVRFVTGNKILRIL
KSKGLAPDLPEDLYHLIKKAVAVRKHLERNRKDKDAKFRLLILIESRIHRLARYYKTKRVLPNWKYESSTASALV
A

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FIGURE 3173

GGGGAGAGAAGGCCCGAGGGGCTCTGCGTTCTGTAGTGGCGCTGCTTGGGCCCGTGGCGGATTGTAAGCTGCTG
GTTTTGCGGCTGGGAAGAGCGGCGAGAGGGTTTCGGCATTTCGTCGGGATCCCCGCAAGGATGAGTGTGCCAG
AGAGTCTCACC CGCATGGGGTGAAGCGTTCAGCCTCCCCAGACGACGATCTGGGATCTAGCAATTGGGAGGCAGC
AGACTTGGGTAAATGAAGAGAGAAAACAAAAGTTCTTGAGACTTATGGGTGCAGGAAAGAAAGAACATACTGGTCG
TCTTGTTATAGGAGATCACAAATCAACATCTCACTTCCGAACCGGGGAAGAAGACAAGAAAATTAATGAAGAACT
GGAGTCTCAATATCAGCAAAGTATGGACAGTAAATTATCAGGAAGATATCGGCGACATTGTGGACTTGGCTTCAG
TGAGGTAGAAGACCATGATGGAGAAGGTGATGTGGCTGGAGATGATGATGATGACGATGATGATTACCTGATCC
TGAAAGTCCAGATGATTCTGAAAGCGATTTCAGAGTCAGAGAAAGAAGAATCTGCTGAAGAACTCCAAGCTGCTGA
GCACCCTGATGAAGTGGAGGATCCCCAAAACAAAAAGATGCAAAAAGCAATTATAAAATGATGTTTGTTAAATC
CAGTGGTTCTAACTCCCAAACGCTTAGTCTTTGTATTAAAAGTAAGCCTTATTGTTACAATGCACAGTGGAGGA
CTGCTTATAGAGCACAGACCTTTGTATTATAATTTTAAAAAGGCCCTTTTAAATAATTACAAAGAGTGTGTGCT
TTCAAATGCCATGGGTACACTTTTATGGGCATGACTATAACCATTTTGTAAAGAGTAAGAGTTGTATAAAATA
AGAAATAAATACAGTACTCAACTTCCTTTTCATATTAGCATCATCAACCCTCTAATTCACCTTATGGGGGAAATGC
TTCTTTTGTGTTGTAGCTATTTTATCATTTCTTCATATTTTCTCTTATAAAAATGTATTTGATACTGTGA
TATGTTACGAAAAGTATTCTTTAATTATTCTTTGTTATAGTAGAGCTGTTTATTATGGATATTTCTGCTGCCAG
TCACAATCTAAATTAATTTTGGCAAAAGATTGGGTACTTAGTTGCCTGTTACTGAGTTAGCTCTACTCTTTTGA
CCAAAGCAACATGAGAGCAAGTACTTTTCACACTTGTTAAGATGGAGTTATACTGTCATACATTTGGAATATTA
TGATCCCAAGTAGTCTTTTATAATTTGGATTGTATCGTATGTTAGATTTTGTATAAAATTTGGCCAATTTTAC
AGAAGAAATTCCTGATCATTAGTTCTATCTATTTAGAAATATGTAAACTGGATTTTTTTTTTAAGTAATATGT
GACCAAAGTTAATTTTGTCCCAAAGGTCTAAATAAAGAGCAGTTTCCACAAAAA
AAAA

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FIGURE 3174

MSAARESHPHGVKRSASPDDDLGSSNWEAADLGNEERKQKFLRLMGAGKKEHTGRLVIGDHKSTSHFRTGEEDKK
INEELESQYQQSMDSKLSGRYRRHCGLGFSEVEDHDGEGDVAGDDDDDDDDSPDPESPDDSESDSESEKEESAEE
LQAAEHPDEVEDPKNKKDAKSNYKMMFVKSSGS

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FIGURE 3175

TGCTGCAGCCGCTGCCGCCGATTCCGGATCTCATTGCCACGCGCCCCGACGACCGCCCGACGTGCATTCCC
GATTCCTTTTGGTTCCAAGTCCAATATGGCAACTCTAAAGGATCAGCTGATTTATAATCTTCTAAAGGAAGAACAGAC
CCCCAGAATAAGATTACAGTTGTTGGGGTTGGTGCTGTTGGCATGGCCTGTGCCATCAGTATCTTAATGAAGGA
CTTGGCAGATGAAC TTGCTCTTGTGATGTCATCGAAGACAAATTGAAGGGAGAGATGATGGATCTCCAACATGG
CAGCCTTTTCTTAGAACACCAAAGATTGTCTCTGGCAAAGACTATAATGTAAGTGCAAACTCCAAGCTGGTCAT
TATCACGGCTGGGGCACGTCAGCAAGAGGGAGAAAGCCGTCTTAATTGGTCCAGCGTAACGTGAACATATTTAA
ATTTCATCATTCCTAATGTTGTAAAATACAGCCCGAAGTGAAGTTGCTTATTGTTTCAAATCCAGTGGATATCTT
GACCTACGTGGCTTGGAAGATAAGTGGTTTTCCCAAAAACCGTGTTATTGGAAGTGGTTGCAATCTGGATTGAGC
CCGATTCCGTTACCTGATGGGGGAAAGGCTGGGAGTTACCCATTAAAGCTGTCATGGGTGGGTCTTGGGGAAACA
TGGAGATTCCAGTGTGCTGTATGGAGTGGAAATGAATGTTGCTGGTGTCTCTCTGAAGACTCTGCACCCAGATTT
AGGGACTGATAAAGATAAGGAACAGTGGAAAGAGGTTACAAAGCAGGTGGTTGAGAGTGCTTATGAGGTGATCAA
ACTCAAAGGCTACACATCCTGGGCTATTGGACTCTCTGTAGCAGATTGGCAGAGAGTATAATGAAGAACTTTAG
GCGGGTGCACCCAGTTTCCACCATGATTAAGGGTCTTTACGGAATAAAGGATGATGCTTCTCCTTAGTGTTCTTG
CATTTTGGGACAGAATGGAATCTCAGACCTTGTGAAGGTGACTCTGACTTCTGAGGAAGAGGCCCGTTTGAAGAA
GAGTGCAGATACACTTTGGGGGATCCAAAAGGAGCTGCAATTTTAAAGTCTTCTGATGTCATATCATTTCACTGT
CTAGGCTACAACAGGATTCTAGGTGGAGGTTGTGCATGTTGTCCTTTTATCTGATCTGTGATTAAAGCAGTAAT
ATTTTAAGATGGACTGGGAAAAACATCAACTCCTGAAGTTAGAAATAAGAATGGTTTGTAATCCACAGCTATA
TCCTGATGCTGGATGGTATTAATCTTGTGTAGTCTTCAACTGGTTAGTGTGAAATAGTCTGCCACCTCTGACGC
ACCACTGCCAATGCTGTACGTACTGCATTTGCCCTTGAGCCAGGTGGATGTTACCGTGTGTTATATAACTTCC
TGGCTCCTTCACTGAACATGCC TAGTCCAACATTTTTTCCAGTGAGTCACATCCTGGGATCCAGTGTATAAATC
CAATATCATGTCTTGTGCATAATTCTTCCAAAGGATCTTATTTGTGAAGTATATCAGTAGTGACATTACCATA
TAATGTAAAAAGATCTACATACAAACAATGCAACCAACTATCCAAGTGTTATACCAACTAAAACCCCCAATAAAC
CTTGAACAGTG